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A CLINICAL LECTURE.

By DOUGLASS W. MONTGOMERY. M.D., Professor of Diseases of the Skin, Medical Department, University of California.

Delivered at the University Clinic.

Pigmentation of the Forehead following a Syphilitic Roseola.

The patient, a laboring man, aged 36, came to the surgical clinic on August 8, 1896, with a small ulcer on the corona. He said that three weeks before he first noticed a pimple, and two or three weeks previous to that he had been exposed to contagion. When he first came to the surgical clinic on August 8th, the symptoms were not developed enough to make a positive diagnosis, but on his return last Wednesday, September 23d, both the chancre and the rash on the skin were so characteristic as to leave no doubt of the nature of the affection, and the patient was turned over to the clinic for diseases of the skin.

At present the patient has a gigantic sclerosis, extending from the corona down into the sulcus, and out along the inner surface of the prepuce, so that when the foreskin is retracted it flares out like an ear on the side of the head of the penis. There is now no evidence of the previously existing ulcer, and very little indication of inflammatory action either on the surface of the glans penis, or in the sulcus, or on the inner surface of the foreskin. Looking at such an object for the first time, and without prejudice, one would say that the huge, firm, flaring structure was a piece of gristle or cartilage growing out from the penis into the connective tissue of the foreskin. The untrained observer would say that it was not an inflammatory lesion, because there was neither heat, redness, nor pain, yet it is an inflammatory lesion, but one of very low intensity, and with little tendency to the formation of pus. It is the typical and peculiar inflammatory induration that occurs at the site of a chancre, and that often persists long after the chancre is healed, especially when no treatment has been given. Besides this sclerosis, or syphilitic induration, this man has a well marked roseola on the trunk and limbs, that, he says, appeared about ten days ago.

Very often the enlargement of the superficial lymphatic glands is an important symptom in the diagnosis of a case of early syphilitic infection. The glandular enlargement here is, however, not of such a character as to make it of much diagnostic importance. The glands under both sides of the lower jaw, the left epitrochlear, and the glands in both groins, and those below the groins on the front of the thighs, are enlarged.

The patient says the groin glands have always been large, and they are so in very many people. To such an extent is this the case, that unless the enlargement of this region can be definitely stated to be recent, and is pronounced, and implicates several of the glands, it cuts very little figure in a diagnosis. Enlargement of those in the neighborhood of the saphenous opening on the front of the thigh is a more reliable symptom. The enlargement of the left epitrochlear gland might easily be a consequence of his occupation, as the hands are frequently wounded in the rough work of a laboring man. As for the glands under the jaw, they frequently swell on catching cold, and the patient complains of a slight sore throat that came on a few days ago, which may be either a simple or a syphilitic angina.

In other words, enlargement of the superficial lymphatic glands must be pronounced, or universal, or both, to be of much value in the diagnosis of chancre, or of recent constitutional syphilis. If there is a chancre and a number of the neighboring lymphatic glands are pronouncedly and indolently swollen, then the enlargement is of diagnostic value. Or if a patient is suffering from some indeterminate symptoms of early constitutional syphilis, and has universal swelling of the superficial lymphatic glands, then the symptom is also of value. But it is comparatively rare for all the lymphatic glands to be verifiably engorged in secondary syphilis. In different people different sets of them are affected, and, as has been indicated in speaking of the glands near the saphenous opening, they are not all equipollent as a symptom of syphilis; they do not all stand on the same footing and cannot be taken equally.

For instance, enlargement of both epitrochlear glands is of much more importance, diagnostically, than swelling of any of the others, though bilateral engorgement even of these, is not, as Sigmund at one time thought, pathognomonic of syphilis. Many people, however, like this man, who are clearly suffering from early constitutional syphilis, show no glandular enlargement surely attributable to this disease, and there may be no demonstrable nodules at all excepting a few close to the primary lesion, and these, in the case of the groin glands in chancre of the penis, are frequently enlarged before the acquisition of the disease.

This patient has yet another symptom, a fawn-colored diffuse pigmentation of the forehead extending along below the hair line. He says that the red rash, the roseola, began on the face about two weeks ago, and a few days afterward extended to the body; that it was particularly well marked on the forehead, and that on disappearing it left the present fawn-colored pigmentation. It is usual for a roseola spot, on fading, to leave a pigmented area, but it is not usual for a syphilitic roseola to occur on the face at all, and it is quite a rare event for it to be so intense and confluent on the forehead, as it must have been in this man, to leave such a marked diffuse pigmentation on his fair, florid skin.

Besides the sclerosis, the enlargement of the glands, which, as before stated, was not characteristic, the rash, the pigmentation of the forehead, and the slight sore throat, the patient said he did not feel quite so well as usual, but this lowering of his general health was not at all serious, and did not prevent him from working.

Although these were the patient's only symptoms, yet they were quite sufficient to mark the case as syphilitic, and the history, which so often is faulty, agreed fully with what we know of the course of the disease. He had had illicit connection toward the latter part of June, and two or three weeks afterward a pimple appeared on the corona. This pimple broke down into a small ulcer, and around the ulcer there developed a gigantic induration, that persisted long after the ulcer had healed. A roseola rash appeared on the face about the eleventh week after inoculation, and spread down over the body, The sore throat appeared about the same time as the roseola, and may have been due to a similar rash in the throat.

PATHOLOGY AND TREATMENT OF INDOLENT ULCERS.

By P. N. Russell, M.D., Fresno, Cal.

Read before the San Joaquin Valley Medical Society.

It is not my object to attempt a lengthy, exhaustive, or systematic exposition of this subject, but to give a brief pathological description of indolent ulcers, with a general outline of the principles of treatment, simplified as much as possible, which I have found most successful in practice.

Every one can practically agree that an ulcer is a wounded surface, which shows no tendency to heal, and from personal observations and examinations, we conclude that ulceration mostly starts from chronic inflammation and is always preceded by cellular infiltration of the tissues.

This inflammation may be located in the depth of the cutis, in the cellular tissues, muscles, glands, periosteum, or bones, but it generally occurs on the skin of the anterior portion of the leg. In the center of the inflamed spot there is suppuration, caseous degeneration, or some other form of softening and breaking down, with gradual peripheral progression and perforation of the skin from within outward. The surrounding parts are swollen and inflamed, the vessels dilated, and the skin sensitive.

The excavated ulcer is thus formed and if, at this stage of the ulceration, the parts could be put at rest and protected from further irritation, the epidermis would, gradually, be regenerated, and the still superficial ulcer would cicatrize. But usually the slight superficial wound is neglected or unnoticed, and is exposed to new irritations; it begins to suppurate; molecular destruction takes place; the result is a loss of substance and the ulcer grows deeper and wider. We have a disturbance of nutrition and new formation of cells, with slight vitality, and consequently a molecular disintegration takes place.

These ulcers have thickened and frequently overhanging hardened edges, caused by ineffectual attempts of the surrounding skin to form cicatricial tissue and epidermis. They are always ready to take on a sloughing action from any slight cause. It is common also to find a sloughing surface, not from inflammatory action, but from the extremely weak and lowered vitality of the granulations. Under these circumstances the surface of the sore becomes covered with a greenish fetid secretion, the granulations, as they form, dying

Anything which produces injury, irritation, or friction, may cause these ulcers. A still more frequent cause of chronic inflammation, followed by ulceration, is venous congestion, and as a result of the distention of the small cutaneous veins, there is a chronic serous infiltration of the skin, followed by cellular infiltration and thickening, and at last suppuration and disintegration. Varicose veins is another cause, and they are frequently a complication of the disease.

It is of the highest importance to have a clear conception of the indications for treatment; for without such conception, we will fail to cure the disease. The first requirement necessary to induce healing of an ulcer, is to arrest the disintegration on the surface, and next to get the floor of the ulcer to assume a clean, healthy, granulating surface, which goes on to cicatrize in the usual way. It is absolutely necessary, also, that there should be a free development of vessels and stronger cells, which do not suppurate, but which go on to new connective tissue formation. Another, and one of the most important indications for treatment, is to improve the venous circulation, thereby diminishing the swelling, promoting absorption of the indurated edges and base of the ulcer, and improving the general nutrition of the parts.

I usually begin the treatment by thoroughly cleansing and rubbing the ulcerated surface with a flannel cloth, soap, and hot water. I cocainize, if necessary, and occasionally, though rarely, curette the surface, and make a few small radiating incisions through the indurated edges. I finish this process by disinfecting the cavity of the ulcer with bichloride or carbolic acid solution. After this cleansing and disinfection, I apply simple ointment to the skin for a considerable distance around the ulcer and then fill the excavation with iodoform. After this I dust boracic acid over the iodoform and over the ointment. I next take a fair sized piece of guttapercha tissue, punch small holes in it, and apply it smoothly to the ulcerated surface. Now comes the most important part of the treatment: the rubber bandage. I apply it carefully, including the foot, comfortably tight, and going above the ulcer, and the first dressing is finished. The dressing is repeated, according to the exigencies of the case, from once every day to twice a week. The subsequent dressings are simpler. Carefully cleanse the parts, apply the powders, ointment, guttapercha tissue, and bandage as before. The limb and ulcer may need an occasional bathing in hot water, and the limb a rubbing.

The bandage is removed on going to bed and reapplied on rising. The guttapercha tissue adheres to the ointment and makes an excellent protective. It is safer to apply the rubber bandage outside of the stocking. I had one severe case of eczema develop after applying it next the skin. I instruct my patients to continue to wear the bandage after the ulcers are healed, and until the leg is well and sound and the venous circulation is perfect.

Sometimes I supplement this treatment with an occasional mopping out of the ulcerated surface with hydrogen peroxide (Marchand's) where the new cells continue to show a tendency toward molecular disintegration; or if I find that there is a necessity for continued stimulation of the granulating surface, dusting the parts lightly with the mild chloride of mercury, will meet the indications admirably. In addition to the local measures, the general condition should carefully be looked after and constitutional treatment be given if necessary.

In conclusion, let me say, that I have, while studying the indications for treatment, attempted to arrive at a simple, definite, and rational plan, that would appeal at once to reason; for experience has taught me that frequently the most scientific plan is the simplest.

At first glance, it may seem superfluous to give so much of the details of treatment, but I am thoroughly convinced that we often fail for lack of system and from not carrying out these very details.

COMMENTS ON AN UNPUBLISHED AUTOGRAPH LETTER OF DR. EDWARD JENNER, THE DISCOVERER OF VACCINATION.

By C. F. Griffin, M. D., San Francisco, Cal.

Read before the San Francisco Medico-Chirurgical Society.

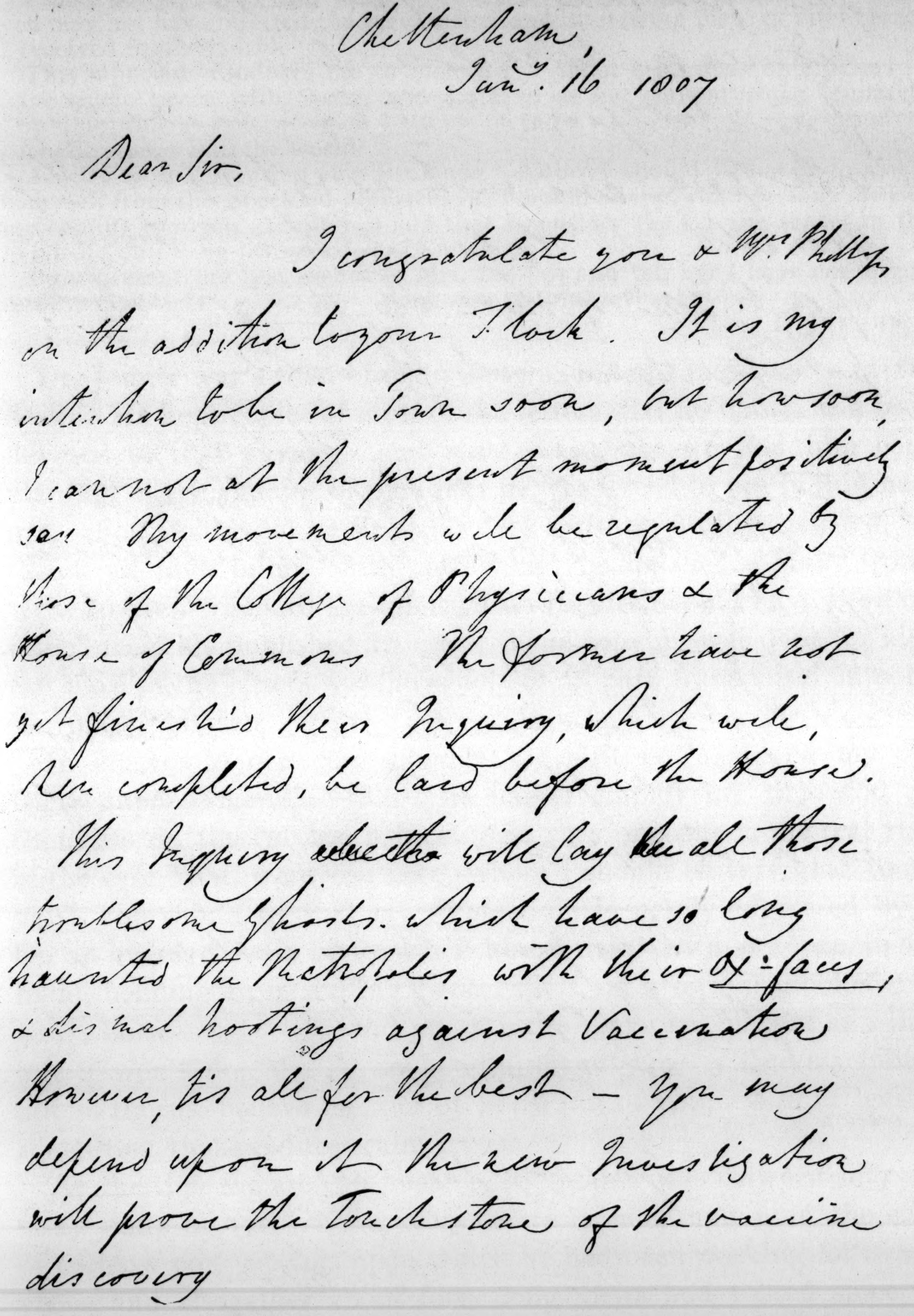
The wonderful weakness that mankind has for writing things on paper with a pen, is ever a theme in the minds of those who write. Man has been well described as the only animal that moves in solemn processions. Yet it is true that if some mighty power should put him to a test, and compel a choice, he sorrowfully would part with his time-hallowed custom and parade no more, if he could only be allowed to write.

Our gentle American poet-physician, Holmes, has given his impression upon the subject in the following lines:

"If all the trees in all the woods were men,
And each and every blade of grass a pen;
If every leaf on every shrub and tree
Turned to a sheet of foolscap; every sea
Were changed to ink, and all earth's living tribes
Had nothing else to do but act as scribes,
And for ten thousand ages, day and night,
The human race should write, and write, and write,
Till all the pens and paper were used up,
And the large inkstand was an empty cup,
Stiil would the scribblers clustered round its brink,
Call for more pens, more paper and more ink."

In Dr. Jenner this weakness was very marked, even carrying him to the extreme of making verses. We will now turn our attention to the following letter, which is lying upon the President's table.

[FAC SIMILE OF LETTER RE-ARRANGED AND SLIGHTLY REDUCED.]



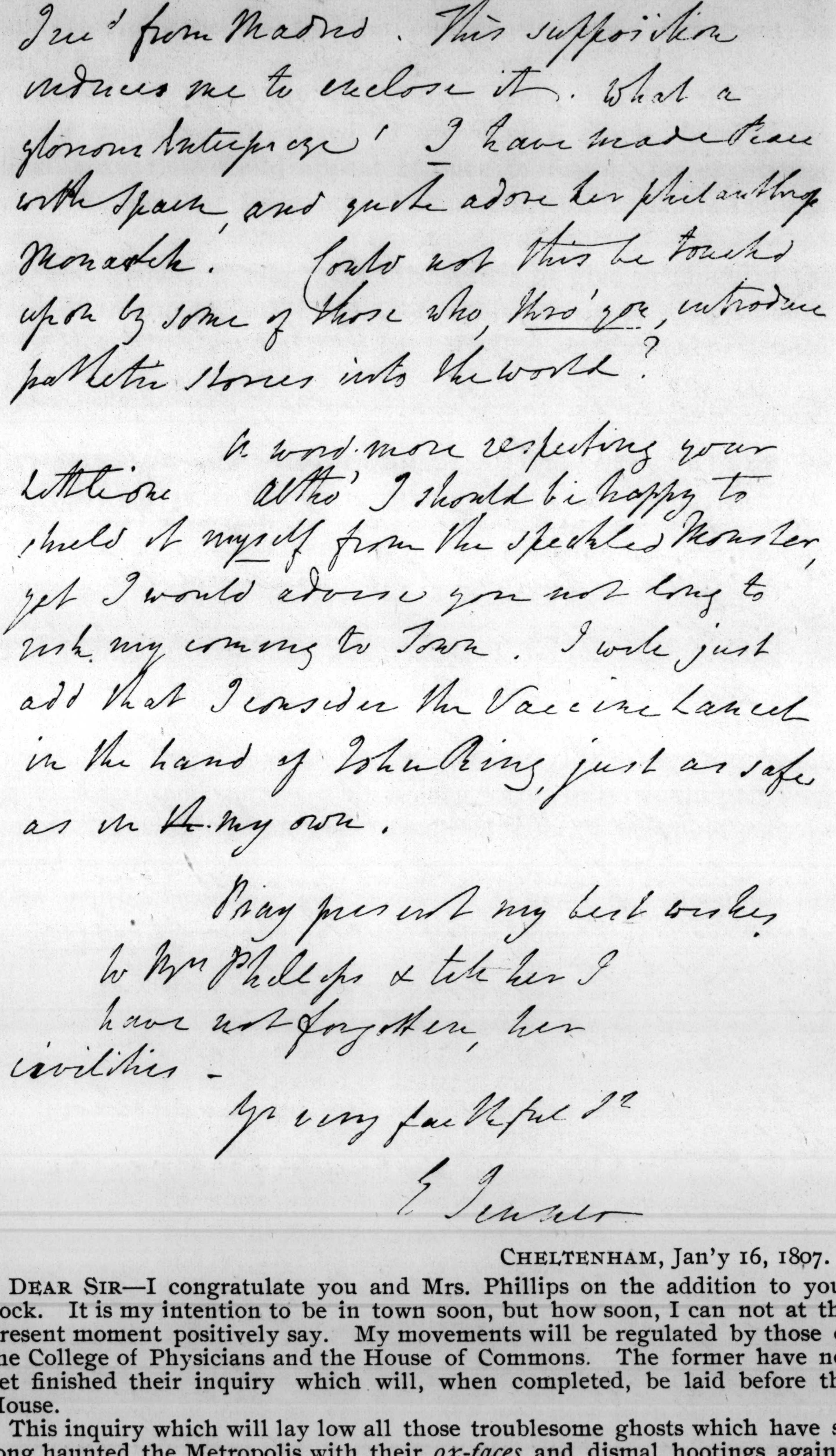
Cheltenham,
Jany. 16 1807

Dear Sir,

I congratulate you & Mr. Phillips on the addition to your Flock. It is my intention to be in Town soon, but how soon, I cannot at the present moment positively say. My movements will be regulated by those of the College of Physicians & the House of Commons. The former have not yet finish'd their Inquiry, which will, when completed, be laid before the House.

This Inquiry ~~whether~~ will lay ~~the~~ all those troublesome Ghosts which have so long haunted the Metropolis with their Ox-faces, & dismal hootings against Vaccination. However, 'tis all for the best — You may depend upon it the new Investigation will prove the Touchstone of the vaccine discovery

Have not yet seen your Month Mag. for the present Month. Probably you may not have inserted the very curious & interesting piece of intelligence



Rec^d from Madrid. This supposition induces me to enclose it. What a glorious Enterprize! I have made Peace with Spain, and quite adore her philanthropic Monarch. Could not this be touched upon by some of those who, thro' you, introduce pathetic stories into the world?

A word more respecting your little one. Altho' I should be happy to shield it myself from the speckled Monster, yet I would advise you not long to wait my coming to Town. I will just add that I consider the Vaccine Lancet in the hand of John Ring, just as safe as in ~~th~~ my own.

Pray present my best wishes to M^{rs} Phillips & tell her I have not forgotten her civilities –

Y^r very faithful S^r

E Jenner

CHELTENHAM, Jan'y 16, 1807.

DEAR SIR—I congratulate you and Mrs. Phillips on the addition to your flock. It is my intention to be in town soon, but how soon, I can not at the present moment positively say. My movements will be regulated by those of the College of Physicians and the House of Commons. The former have not yet finished their inquiry which will, when completed, be laid before the House.

This inquiry which will lay low all those troublesome ghosts which have so long haunted the Metropolis with their *ox-faces* and dismal hootings against vaccination.

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I have not yet seen your *Monthly Mag.* for the present month. Probably you may not have inserted the very curious and interesting piece of intelligence I received from Madrid.

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A word more respecting your little one. Altho' I should be happy to shield it myself from the Speckled Monster, yet I would advise you not long to risk my coming to town. I will just add that I consider the vaccine lancet in the hand of John Ring just as safe as in my own.

Pray present my best wishes to Mrs. Phillips and tell her I have not forgotten her civilities. Your very faithful servant,

E. JENNER.

Dr. Jenner was a man of many letters, and at times a slave at the desk. He kept copies of most of the letters that he wrote, in a book devoted to that purpose; and more than once we find him complaining of the amount of time that he was forced to use in this manner. For hours did he sit at his desk writing, until exhausted, his "back all in a hump," the task would be finished. Many would write to him, when all the information required could have been obtained from his published articles. Some copying was done for him, but most of the letters were in whole or in part transcribed into his journal by himself.

In answer to one correspondent he writes: "You and my city friend suppose me idle—that I no longer employ my time and my thoughts on the vaccine subject. So very opposite is the real state of the case, that, were you here (where I should be very glad to see you), you would see that my whole time is nearly engrossed by it. On an average I am at least six hours daily with my pen in my hand, bending over writing paper, till I am grown as crooked as a cow's horn, * * * and *you* want to make me as mad as a bull; but it won't do, Mr. D., so good night to you. I'll to my pillow, not of thorns, believe me, nor of hops, but of poppies, or at least of something that produces calm repose."

At the time we are considering, Dr. Jenner was between fifty and sixty years of age. Nine years before he had announced the effect of the cow-pox vaccine, upon which he had been working for twenty years, and altogether about forty long years had passed since the unknown dairy-maid told an open barnyard secret, that all but one of a sleeping profession would not believe.

The letter came into the possession of Dr. L. C. Lane about twelve years ago. It was sent to him by a personal friend, Mr. Charles Botts, who found it in an old volume of medical anecdotes in a book-stall. Mr. Botts is not now living, but was at one time a well-known lawyer in this city. He says in a letter which accompanied the gift, "I am sure this original letter would be a very acceptable present to the celebrated museum of the London 'College of Surgeons,' and I thought that it might be esteemed as a curiosity by you or the college of which you are the distinguished founder."

Mr. Botts continues: "My knowledge of Jenner and my regard for him commenced with an episode of my childhood. About the year 1817 I was at school in a village in the State of Virginia, about thirty miles south of Washington City. In this little town there were two doctors, who were, of course, rivals and enemies. One of them was a Scotchman, named Spence, highly esteemed as a physician, a scholar, and a gentleman. Bronaugh, his rival, was less learned, but still a very successful country practitioner. Spence called his boy, my schoolmate and intimate friend, Edward Jenner. Bronaugh said that Spence and Jenner were both quacks. This coming to the ears of the irate Scotchman, led to a personal encounter in the main street of the village, of which I and my friend Edward were witnesses. We, of course, sided with Spence.

Spence's son was at this time about nine years old, and thus it appears that when the people of London were greeting Jenner with 'dismal hootings,' and the British House of Commons were doubting, there was a man in an obscure country village, away off in the wilds of America, who recorded his appreciation of this great benefactor of the human race by conferring his name upon his first-born."

Coming to us, as did the letter, in such an irregular manner, makes it reasonable to doubt its authenticity. The only way to satisfactorily dispose of such a question is to make a careful study of the handwriting, and of the contents of the letter, and to compare the one with a genuine specimen, and the other with the recorded facts.

There has been placed, for your inspection, upon the table of the President, a copy of the *Lancet*, dated July 27, 1896. On page 1773 there appears a *fac simile* of a letter bearing the signature of Dr. Jenner. On the authority of Mr. Thomas Bryant, Consulting Surgeon of Guy's Hospital, London, we may state this *fac simile* was reproduced from the original in the possession of the Royal College of Surgeons of England. Taking, then, this admittedly genuine letter, as a standard of Jennerian penmanship, and comparing it with the one which we are now considering, we find many evidences of similarity.

At the very beginning of the *fac simile* we note the formation of the capital "D" beginning the words Dear Gardner—the first straight down stroke, the dip, the curved up stroke passing the start evenly, and the straight finish. It is the same in our letter. The letter "I" is the old fashioned one—a little circle at the beginning of a long curved line. It is the same in both letters. Capitals are strewn rather carelessly about in both letters. In both we find the tails of "y's" and "g's" with the same characteristics—a sweep to the left. The words which end with two "l's," as small and will, in both letters, have the final "l" shortened—resembling a small "e." Words ending in "d" are finished with the up stroke, the down stroke being nearly always omitted. In both letters the small "r's" occurring in the middle of words, are of the inverted form. The final ones are of ordinary form, as are the initial ones. The final "t's" are seldom crossed.

The habit of abbreviating some words is manifest in both letters. In the *fac simile* we find the words "produced," "promised," and "Edward" so treated. In our letter we find the words "January," "received," "through," "although," "your," and "servant," abbreviated in a similar way. "Your very faithful servant," was a favorite signature of Jenner's, and is seen in many of his letters.

These are a few of the resemblances that may be found in a cursory study. The limits of this paper and the demands of time forbid a more extended comparison.

Coming now to the subject matter of the letter, we find it dated at Cheltenham, January 16, 1807. The biography left us by Dr. Baron, which is by far the best in existence, does not distinctly state that Dr. Jenner was in Cheltenham on this particular date, yet the impression is left that he was in the neighborhood at about that time. It is certain that he was there early in December, about five weeks before the date of our letter. The difficulty in locating Jenner at any particular time is due to the custom he had while attending his patients, of traveling about the various country districts in which they lived. In dangerous cases he would often remain for days at a time at the residences of the patients, attending them in person.

As Jenner had a wide reputation, he was sometimes in Cheltenham, sometimes in Berkeley, and sometimes in other rural places. The best picture that we have of him is that of a country doctor, going about the small villages and rural lanes of a dairy country, attending to everyday practice. Vaccinating the people, men, women and children, formed a large part of his work.

Cheltenham and Berkeley are, in round numbers, about one hundred miles from London, a very inconvenient distance, especially as in Jenner's time it required about three days to make the journey. Nevertheless, he neglected his business when necessary and took this tiresome trip in order to advance the practice of vaccination.

The first journey was made in 1798, just previous to the publication of his pamphlet announcing the discovery that the cow-pox disease protected against small-pox. For three months Jenner roamed the city of London, vainly trying to find some one among its thousands of medical men to allow him to use a patient for the purpose of a demonstration. Not a single one would permit him to make the test. Poor Jenner, how he must have felt! With a heavy heart he sadly turned toward home. Before going, however, some vaccine matter was placed in the hands of Mr. Cline, who was then widely known as a surgeon. From this seed grew up the splendid tree that we know so well to-day. With this heart-breaking experience in London, Dr. Jenner's trials began.

His pamphlet was half read, and his experiments misunderstood. Men who knew nothing about vaccination pretended to know all about it. About this time Mr. Cline, remembering the cow-pox left him by Dr. Jenner, concentrated his brilliant mind upon a case then under his care, a boy with hip-joint disease. If there was any virtue in the cow-pox, it could here be safely tried. If the boy died—well, hip-joint cases sometimes do not end in recovery. If he did not die, but had a very large and painful sore over the joint, the counter-irritation might combat the original disease. If the sore was not large, it could be converted into a seton wound and counter-irritation secured in that way. Then, if all went well, the boy could be tested for susceptibility to small-pox at any time, because inoculation with that disease was then very common.

This masterly mental effort did not go unrewarded. By great good fortune the virus being still active, the boy was successfully vaccinated, and no doubt loudly bewailed the small but angry-looking sore ("the inflammation extended about four inches") which Mr. Cline had caused. The boy was afterwards inoculated several times with pus from small-pox pustules, but was immune to the disease. Soon this became known, and immediately an army of vaccinators were ready for vaccinating.

In a short time, only a few months, Jenner's presence in London was urgently needed, and so, in 1799, his second visit was made. Its object was principally to correct the errors that were being made by medical men in that city in the use of impure virus. He remained in London three months, accomplishing what little he could.

To the ordinary mind it might appear a trifle strange that Dr. Jenner did not remain in London, as so many of his interests were apparently centered there. As soon as Mr. Cline became convinced of the truth of Jenner's discovery, he wrote, urging him to come to

London at once, assuring him that practice would bring him an income equal to fifty thousand dollars a year.

But the green pastures and quiet places had greater charms for Jenner than did smoky London, with all its promised wealth. In a letter to a friend he says in reference to this subject: "Shall I, who even in the morning of my days sought the lowly and sequestered paths of life, the valley, and not the mountain; shall I, now my evening is fast approaching, hold myself up as an object for fame? Admitting it as a certainty that I obtain both, what stock should I add to my little fund of happiness?"

This was in 1798. Four or five years of worry and trouble over vaccination rolled slowly away, and then Dr. Jenner, like many another man, allowed himself, against his better judgment, to be persuaded into doing what he feared was not wise. He located in London; things financially went from bad to worse. Of this experience he speaks in his own honest way.

"Elated and allured," he writes to a friend, "by the speech of the Chancellor of the Exchequer, I took a house in London for ten years, at a high rent, and furnished it; but my first year's practice convinced me of my own temerity and imprudence, and the falsity of the minister's prediction. My fees fell off both in number and value, for, extraordinary to tell, some of those families in which I had before been employed, now sent to their own domestic surgeons or apothecaries to inoculate their children, alleging that they could not think of troubling Dr. Jenner about a thing so easily executed as vaccine inoculation. Others who gave me such fees as I thought myself entitled to at the first inoculation, reduced them at the second, and sank them still lower at the third."

His conclusion after several years of Metropolitan practice is very clear and lucid. "I have now completely made up my mind respecting London. I have done with it, and have again commenced a village doctor." This experiment of locating in London caused a loss to Dr. Jenner, according to his own statement, of about five thousand dollars a year for the few years that he was in that city.

We have a short description of him as he appeared about this time. He was found in his office "dressed in a blue coat, white waistcoat, nankeen breeches, and white stockings. All the tables in his apartments were covered with letters and papers on the subject of vaccination."

Dr. Jenner was not a tall man; in fact, "his height was rather below the average; his person was robust, but active and well formed." No one has left any description of Jenner's hands, prominent as they were in the realm of medical history. The illustrious John Hunter, however, in one of his letters to Dr. Jenner, would have us believe that the latter had fingers, all of which became, at, times converted into thumbs.

Hunter was at the time engaged in his studies on the temperature in inflammation, and in pursuit of his policy of pressing every possible person into his service, he had Jenner, during the earlier professional career of the latter, taking the temperature of various animals, after making incisions into different parts of their anatomy.

Hunter paid the expenses of these experiments. He had supplied Jenner with a thermometer, and had warned him about being careful with it, especially in putting it into the chest of the dog. Some time later we find Hunter writing in his characteristic way: "You are very sly, although you think I cannot see it; you very modestly ask for a thermometer; I will send one, but take care that those d——d clumsy fingers do not break it also."

Jenner may have had clumsy fingers, but he certainly had a tender heart. The boy Phipps, upon whom he made his first inoculation, was afterwards not neglected or forgotten. Before he was thirty years of age he became ill, and Jenner cared for him. One day a visitor at the doctor's house found lying upon the table there the plan of a cottage. "Oh," said Jenner, when questioned about the plan, "that is for poor Phipps; you remember him; he has a miserable place to live in; I am about to give him another."

The cottage was built and a small garden fixed around it; the rose bushes and shrubbery were taken from Jenner's own stock, and arranged under his personal supervision. Even the cow was not neglected. Her destiny led her not to the meat market nor to the bone yard; for she was turned out to pasture and to peacefully end her days on a farm near Berkeley, while to-day her spotted hide, with its short horn, hangs in the hall of the British Museum.

Jenner's intention to be in town soon, refers to his purpose of presenting evidence concerning vaccination at the investigation of the subject by the College of Physicians.

A brief review of the first Parliamentary grant is necessary for a full understanding of this part of the letter. Jenner was really in need of financial aid at this time. Previous to the announcement of vaccination, it must be remembered, he was busy with a quiet, laborious, but lucrative country practice. We have seen, however, that as his pamphlet became generally known, communications began pouring in upon him from every direction. The blundering practitioners in London caused endless trouble, and Jenner's frequent trips to that city were the source of great expense.

Speaking of this, he says: "Since first I made my discovery public, I was compelled to adopt this measure from observing the confusion that was arising among practitioners in the metropolis, in some measure from a misrepresentation of my facts by some, and a too careless observance of them by others. Foreign nations, too, were sending deputies to inquire into the new practice, and as my aim was to diffuse the knowledge of it as widely as possible and as expeditiously, this work, I was confident, could not go on so well by correspondence only, as by a personal intercourse. My receipts arising from the practice have gone but a little way in reimbursing me. My private affairs, as my time was so incessantly occupied in establishing the new practice, have, of course, experienced that derangement which neglect always brings on. This exposed me to a serious evil, and I never could have persevered to the obvious injury of my family, had I not been buoyed up by a confidence in the generosity of my country.

Ultimately, after much letter writing and much consulting, the friends of Jenner arranged that an attempt be made to induce the House of Commons to reimburse him for the expense to which he had already been put, and to help him defray that to which he was certain to be in future subjected.

A petition was duly presented and was referred to a committee, which waded through a vast amount of evidence, oral and written, concerning the results of the practice of vaccination, which had at this time been on trial by everybody and anybody for about four years. The committee considered: (1) The utility of the discovery. (2) The right of the petitioner to claim the discovery. (3) The advantage in point of medical practice and pecuniary emolument which he derived from it.

The committee in the end reported favorably. The debate in the House of Commons upon this report occurred about the middle of the year 1802, and was rather protracted. Finally, after considering the various sums of $100,000 and $75,000, the sum of $50,000 was decided upon as being the proper amount.

Being voted a sum of money by the House of Commons and receiving the same are two very separate and distinct things, as was painfully evident to poor Jenner, for we find him saying, in a letter dated June 3, 1804: "The treasury still withholds the payment of what was voted me two years ago; and now, there are new officers, the time may be very long before a guinea reaches me from that quarter."

And so we find him in this letter, five years after the first grant, waiting upon the honorable gentlemen again. This time a different course was pursued. In England, the bitter prejudice against vaccination which had been excited by a few persons had obstructed its progress. All the world welcomed vaccination, but it was almost an outcast in its English birthplace. The result was that small-pox, which had been under control in that country, again became prevalent, at the time of our letter.

In July, 1806, therefore, Lord Henry Petty proposed in the House of Commons, an address to His Majesty, praying "that his Royal College of Physicians be requested to inquire into the progress of vaccine inoculation, and to assign the causes of its success being retarded throughout the United Kingdom, in order that their report be made to this House of Parliament; and that we may take the most proper means to publish it to the inhabitants at large."

In accordance therewith, His Majesty requested the Royal College of Physicians to make the inquiry. This task was accomplished in a very thorough manner. They examined voluminous reports, treated the subject exhaustively, and finally reported, strongly recommending the practice of vaccination.

The fact that Dr. Jenner appeared before the Royal College and assisted in presenting the evidence showing what vaccination had accomplished, was what is meant by the statement that his movements would be regulated by those of the College of Physicians.

The words "Troublesome ghosts which have so long haunted the metropolis with their ox-faces," referred to the persistent attempts to defeat the progress of vaccine inoculation, by industriously circulating stories to the effect that the cow-pox matter had a peculiar and disastrous effect upon the human frame; and that this effect was powerful; that it showed itself in the descendants of those inoculated, gradually changing their faces into the semblance of an ox.

These mendacious reports were most actively circulated about the time when this letter was written. It was the very time when they would do the greatest harm to Jenner, whose friends were endeavoring to get the House of Commons to allow another and more adequate grant.

Pictures were published showing, in all its terrible reality, the human face, gradually assuming the features of the cow. "There was a Master Jowles, the cow-poxed, ox-cheeked young gentleman, and Miss Mary Ann Lewis, the cow-poxed, the cow-manged young lady," exhibited in all the touching simplicity of graphic description, by Dr. Wm. Rowley, a learned member of the University of Oxford, etc.

The honorable gentlemen, this time, began the debate on the sum of $50,000 and ended by awarding $100,000. And so the words of Jenner proved true. The new investigation did prove the touchstone of the vaccine discovery.

The interesting piece of intelligence which Jenner received from Madrid was a copy of the Madrid *Gazette*. This paper contained an official account of the trip of Dr. Balmis, who, under the patronage of the King of Spain, had carried the vaccine matter around the world. Taking about two dozen healthy children with him, he succeeded, by arm to arm inoculation, in keeping the matter active long enough to distribute it to all the Spanish possessions in the West Indies and in parts of North and South America. Then, taking about two dozen more children from America, he crossed the Pacific and distributed the vaccine to the East Indian possessions of various nations.

The time occupied in this work was about three years. The report of this trip Jenner received about six weeks before the date of our letter, and so delighted was he with the great and successful undertaking, that he sent copies of the *Gazette* to all his friends.

In this letter, also, there is a little variation of the ''ox-faces'' idea. He says: ''To say the truth, this country has been dreadfully supine in the matter hitherto; however, its energies seem roused, as you will see by the enclosed advertisment. [Probably the one inserted in the papers by the Royal College while its investigations were in progress.] Some pamphlets, full of the grossest misrepresentations and figures, have been spread; and the common people became so terrified, particularly when told that their children, if vaccinated, would take the similitude of bulls and cows, that a great dislike to the practice has arisen among them: and these accounts have been circulated through the country with peculiar industry. * * * The folly of the oppositionists has gone so far as to exhibit prints of children undergoing transformation from the human being into that of a brute.''

''Speckled Monster'' is a favorite expression of Jenner's. The Small-pox Hospital in London was under the control of the anti-vaccinists. The patients were inoculated, not with vaccine, but with variolous matter. Of course this practice was not at all safe. True, it was the best that could be done previous to the discovery of the protective power of cow-pox virus; but at the time of which we are writing there was not a reasonable excuse for its continuance.

Jenner went to the Minister, Mr. Percival, to persuade him at least to have the inoculating of out-patients stopped. ''But, alas, all that I said availed nothing, and the Speckled Monster is still to have the liberty that the Small-pox Hospital, the delusions of Mosely, the caprices and prejudices of the poor, can possibly give him."

It seems almost incredible, but it is nevertheless true, that it required nearly a quarter of a century for vaccination to gain possession of the wards of this hospital. Mosely, Rowley and Pearson were a medical trio particularly anxious to do as much damage as possible to Jenner's growing reputation.

Dr. John Ring was a staunch defender and a warm personal friend of Jenner. He was of great service in London in defending the teaching of Jenner; he also aided the parliamentary friends of the latter when they were endeavoring to procure the grant.

Taking a retrospective view of the letter, we cannot but consider it genuine. We have noted the close similarity in the formation of individual letters, and of words, in the letter, to that of an authentic specimen of Jenner's handwriting. We know, as a matter of history, that his movements were at that time as is here stated, and that this, our letter, was probably one of those joyful ones which originally carried with it the Madrid *Gazette*, a testimonial to the generosity of the Spanish king, to the greatness of Jenner's humane heart and to the excellence of his work.

3144 Twenty-fourth street.

A CASE OF PARALYSIS OF THE LEFT RECURRENT LARYNGEAL NERVE, DUE TO AORTIC ANEURISM.

By A. B. McKEE, M.D., San Francisco, Cal.

Read before the San Francisco Medico-Chirurgical Society.

C. E——, æt. 40 years, native of Germany, came to the Clinic of Cooper Medical College, October 17, 1895, complaining of hoarseness. The patient's voice is reduced almost to a coarse whisper, there being little vocal quality remaining. Patient claims to be in perfect health save for a slight soreness in the thorax, which he attributes to rheumatism from which he formerly suffered. Has never suffered from dyspepsia nor palpitation, except after severe exertion. Coughing and sneezing are also voiceless, thus excluding an hysterical affection. At one time was accustomed to lifting heavy weights; but his work in recent years has caused no unusual strain. No clear history of syphilis obtainable, but patient admits having had some kind of a venereal sore, which healed readily.

The larynx presents the following conditions: The left cord is fixed in the cadaver position. It appears somewhat broader than the right, the latter being somewhat encroached upon by the slightly enlarged false cord. The free border of the left chord is irregular and undermined, and it curves outward presenting a concavity toward the median line. The position remains unchanged during phonation, although the arytenoid cartilage makes short tugging movements toward its fellow. The right cord moves rather freely. but its inner border is also slightly concave.

The degree of the disturbance of phonation in this case is not explainable by reason of the paralysis on the left side. There is doubtless a slight involvement of the thyro-arytenoideus of the right side.

The discovery of a paralysis of this character leads at once to a suspicion of aortic aneurism, its most frequent cause. Examination of the thorax shows visible pulsation at several points, especially in the supra and infra-clavicular regions, and in the left axillary line. The apex beat is found about 3 inches to the left of the mammary line. A distinct bruit is heard transmitted to all parts of the thorax, anteriorly, and posteriorly. The diagnosis "Aneurism of the Arch of the Aorta" was concurred in by Prof. L. C. Lane, who kindly saw the case in consultation with me.

The patient has been taking iodide of potassium in gradually increasing doses, and fancies he notices some improvement; the laryngeal picture, however, remains unchanged.

533 Sutter street.

DEPARTMENTS.

OBSTETRICS, GYNECOLOGY AND PEDIATRICS.

By WALLACE A. BRIGGS, M.D., Sacramento, Cal., and

WM. FITCH CHENEY, B.A., M.D., Adjunct to the Chair of Obstetrics and Diseases of Women and Children, Cooper Medical College, San Francisco, Cal.

How Scarlet Fever is Transmitted.—In the course of a valuable article on prevention and disinfection as applied to scarlet fever, PROFESSOR AUGUSTUS CAILLÉ says that the specific poison of this disease has not as yet been isolated. It probably enters the system through the naso-pharynx and respiratory tract. It is believed, but not proven, that domestic animals may contract scarlet fever transmissible to man. Milk epidemics and drinking water epidemics, as reported in literature, lack bacteriological proof. The common mode of infection is by direct or intermediate contact with a scarlatinous patient, and by contact with the secretions, excretions and exhalations of the body. The period at which scarlet fever is most contagious and the duration of capacity for infection are not definitely known; but as a rule infection ceases with the termination of desquamation and with convalescence.—*Archives of Pediatrics*, November, 1896.

Antistreptococcic Serum for Puerperal Infection. — PROFESSOR BARTON COOKE HIRST reviews the modern method of treating pueperal infection by subcutaneous injection of an antistreptococcic serum. The method has been brought into prominence, especially by Alexander Marmozeck, of Paris, who reports fifteen cases of streptococcus infection in puerperal women in which the serum was employed. Gaulard has reported two cases and Bar and Tissiers ten cases so treated. The results of these trials of the method have not been satisfactory. It requires a long time, and especially virulent inoculations, to obtain a serum with antitoxic and germicidal properties; it should be prepared, therefore, with great care and should be obtained from a thoroughly reliable source. There is a possibility that this serum may contain dangerous toxins, and that the treatment may be more dangerous than the disease. Then again there is a streptococcic infection so virulent that the antitoxin will be of no avail, no matter how strong it may be; and there is always an undeterminable time in streptococcic infections when the serum will be used too late. Another very formidable objection to this method of treating puerperal infections is that the serum has no antagonistic power over other pathogenic organisms than the streptococcus; and it is impossible to determine during life whether the infection is pure or mixed, though the majority of infections are due to the streptococci. Finally, the clinical results of the serum therapy for puerperal infection have not been as yet at all encouraging.—*American Journal of Obstetrics*, August, 1896.

The Infant's Bath.—The first bath should not be in the tub, but only a sponging, done as rapidly as possible, with water decidedly warmer than that used subsequently, to avoid reducing the vital heat. The vernix caseosa is best removed by lard, and after thorough anointing with this the body should be wiped with a sponge and warm water and soap. When the tub is first used, which should not be until after the stump of the cord has dropped off, the period of immersion should be short, and only gradually increased day by day, depending upon the strength of the infant and its power to react. The bath should be given daily until the infant is at least two years old, and the best time is the middle of the forenoon. The water must not be too cold nor too hot, and the hand is an unsafe guide by which to determine the temperature—a bath thermometer should always be used. The soap should preferably be the best grade of white castile. For a dusting powder after the bath talc is the best, but lycopodium, rice powder, magnesia, and starch are almost equally good.—*Archives of Pediatrics*, November, 1896.

Weighing the Baby.—Every infant should be weighed at regular intervals, which should not be greater than once a week during the first six months, and once in two weeks thereafter. No other single method gives such valuable information as to the general health of a child as does the record of its weight. It not infrequently gives warning of the approach of disease, particularly of the chronic and the wasting disease. During the first five or six months an infant who is not gaining four ounces a week should be an object of particular attention. As a rule the original weight is doubled at five months, and trebled at fifteen months.—*Archives of Pediatrics*, December, 1896.

Injection of Cold Water in the Rectum for Hyperpyrexia of Infants.—DR. AUGUST SEIBERT says: "In a number of cases of hyperpyrexia in infants and young children I have found that irrigation of the colon with cold water reduced the temperature of the whole body in a much shorter time than even the cold bath. It is best to begin with tepid water and then cool quickly within 5 minutes, while keeping up the irrigation for 15 to 20 minutes. It is a very simple remedy that can be applied very quickly in nearly all cases of hyperpyrexia where there is no ice, and I have seen none but happy results from it."—*Archives of Pediatrics*, December, 1896.

A New Sign in the Diagnosis of Measles.—HENRY KOPLIK calls attention to a sign of measles almost entirely ignored heretofore. It is found in the mouth and precedes the skin eruption. The appearance in the mouth, to which he refers, is an eruption on the mucous membrane lining the lips and cheeks, consisting of small irregular spots of bright red color. In the center of each spot is a minute bluish white speck. These red spots Koplik claims, with accompanying specks of bluish white color, are absolutely pathognomonic of beginning measles, and when seen can be relied upon as the forerunner of the skin eruption. Sometimes there are only a few of these red spots with central bluish point, but in marked cases they may cover the whole inside of the buccal mucous membrane.—*Archives of Pediatrics*, December, 1896.

SURGERY AND ANATOMY.

By T. W. HUNTINGTON, B.A., M.D., Surgeon Southern Pacific Company's Hospital, Sacramento, Cal., and
GEO. B. SOMERS, M.D., San Francisco, Cal.

Administration of Ether.—"The causes of struggling," says MR. JOHN FREEMAN, "are sometimes fairly obvious and may be due to too strong a vapor being presented to the patient at the commencement of the administration. The patient finding it impossible to breathe this, although he may try his utmost, naturally begins to struggle for breath. Another cause is, that the ether is sometimes commenced when the bag is only half full of air, and some that is in it will very likely be allowed to escape through the face-piece not being applied properly, so in a minute or so the bag is empty. The patient tries to take an inspiration when the bag collapses, as there was so little in it. Under such circumstances is it surprising that the patient, finding he cannot get any air to breathe, should struggle? Again, giving too much fresh air at an early stage of the administration is a frequent cause of struggling. You may see a patient begin to take ether perfectly, and he may have got to the stage where consciousness is just being lost, the breathing being rapid and forcibly expanding the air-bag at each expiration. Should at this period the anesthetist unguardedly allow two or three breaths of fresh air, trouble may be expected. A small quantity of fresh air at this stage will restore the patient's consciousness, and bring back sensitiveness to his air-passages. On the inhaler being reapplied the patient instantly holds his breath; he feels and realizes the pungency of the odor, and struggling, vomiting, and other troubles rapidly follow each other."—*Bristol Medico-Chirurgical Journal*, June, 1896.

Ambulatory Treatment of Fractures of the Lower Extremities.—In the discussion of a paper by DR. PILCHER, of Brooklyn, DR. JOHN E. OWENS, of Chicago, offered the following conclusions, based on his experience: (1) That the main object in the treatment is to enable the patient, in a few days, to get up and walk about on the fractured leg. (2) That union is accelerated in many cases; comfort, appetite, digestion, and sleep secured; swelling, muscular atrophy, pneumonia, and delirium tremens prevented, and flexion and extension maintained. (3) That in the application of the dressing, the foot is maintained at a right angle to the leg, and extension maintained until the deformity is corrected and the legs are of even length. (4) That the material usually employed is plaster of paris, in which wooden or metal strips may be included, there being a thick plaster sole, separated from the foot by a layer of cotton about 5 centimeters thick, the plaster being carefully moulded with the hand, so as to fit snugly against the upper end of the tibia and about the dorsum and ankle. (5) It is generally thought best not to apply the dressing until the second or third day after the accident. (6) The patient must remain under observation in order that any displacement, undue constriction, or other defect may be noted. (7) In fractures of the thigh, a combination of plaster of paris and glue is recommended by some, while others have used special splints. (8) The plaster may be made to include the pelvis. (9) The dressing may be applied to the leg and then allowed to harden, after which the patient's hips are raised from the bed, extension being made to correct displacement, and the remainder of the dressing applied. (10) An important feature of the dressing is its strong reinforcement and close application at the upper and back part of the thigh; thus securing a firm bearing against the ischium and perineum. (11) The sooner the immobilization is effected the less will be the swelling. (12) That the method can be applied with great satisfaction, and that an exact fit must be secured.—*Boston Medical and Surgical Journal*, August 13, 1896.

Wiring in Fracture of the Olecranon.—The following abstract is from the *Therapeutic Gazette:* ADENT (*Lyon Medical*) reports the case of a man who sustained a compound fracture of the olecranon process. The separation was of the width of two fingers. The wound having been closed, the fragment was brought down and sutured in place with two silver wires. The arm was placed in plaster in a slightly extended position. One of the metallic sutures was removed on the twentieth day, but it was impossible to remove the other. This latter presented itself beneath the skin one and a half months later, and was removed without trouble. Three months later the movements of the articulation were complete.—*University Medical Magazine.*

Ultimate Results of Fracture of the Leg.—JOTTKOWITZ has made a careful statistical study of the ultimate functional results of 71 fractures. Of these the average number of days spent in the treatment of each was 116; 54 days were devoted to direct surgical treatment, with the idea of producing firm union of the bone; 42 to medico-mechanical treatment. Of this number, 39 were functionally perfect at the end of treatment; 34 of these within the first three months; 5 within the first four months; 32 were still partially crippled; the disability amounting to 10 to 20 per cent. in 3; 20 to 30 per cent. in 18, and 30 to 40 per cent. in 11. Of 40 maleolar fractures, perfect function was obtained in 31, after an average of 89 days treatment. Of the remaining 9 cases, the greatest disability was not over 40 per cent. Of 31 fractures of the diaphysis, 8 were functionally perfect in 151 days. After this period 1 was disabled to the extent of 20 per cent.; 15 to the extent of 30 per cent., and 7 to the extent of 40 per cent. The disability was in no case due to vicious union or failure to unite. Usually it depended upon a slight grade of anchylosis, hypertrophy, callus, muscular atrophy, or recurrent edema on exertion, especially in old people. Pain and weakness on motion were also often causes of disability, and were only accepted, in the absence of definite lesions, from those whose character and reputation gave them a right to be believed. The average time of treatment for malleolar fracture was found to be 90 days for fractures of the tibia, and fibula 120 days.—*Therapeutic Gazette*, August 15, 1896. [The object of the above paper was to show that mere osseous union cannot be considered a "cure." The time necessary to procure perfect functional results, after fractures, is much longer than is laid down in the text-books, or realized by the general practitioner.—G. B. S.]

Structure of the Ureter.—The ureter is practically a muscle traversed by a channel, lined with epithelium. At its lower end the muscle-tissue of the ureter is directly continuous with that of the bladder. It has been determined by actual observation that rythmical waves of peristaltic contraction occur in the ureter, the waves passing invariably from the kidney to the bladder. As these contractions of the ureter arise much in the same way as those in the muscular substance of the heart, we may, with Foster, speak of them as "beats." These spontaneous movements, or beats, "are subordinated to the flow of urine into the pelvis; the more active the secretion of urine the more frequent and vigorous are the beats of the pelvis and the ureter." It is very fallacious to simply regard the ureter as a passive conduit; urine is conveyed along it on the same principle that fluid is conducted into the stomach by the esophagus. In illustration of these facts, a case is detailed where the ureter became involved in inflammatory adhesions after an ovariotomy. An ureteric fistula resulted, together with great contraction of the bladder. The contracted bladder gave much trouble through painful and frequent micturition. It was inferred that the implication of the ureter near its vesical termination teased the bladder and induced tonic contraction of its muscle-tissue. Removal of the kidney on the side of the involved ureter cured the patient of all bladder symptoms. The removed kidney was perfectly healthy. The bladder increased in capacity when the source of irritation was removed.—*Lancet.*

OPHTHALMOLOGY, OTOLOGY AND LARYNGOLOGY.

By Wm. Ellery Briggs, M.D., Sacramento, Cal.

A Test for Simulation.—Dr. Helmbold says that it is not rare to find patients who simulate a great loss of visual acuteness, in whom it is difficult to determine the true condition. A very simple method by which it is possible to come rapidly to a conclusion is as follows: Hang a test card at the usual distance of 5 or 6 meters. After correction of refraction anomalies have the patient read the letters he can make out. He will perhaps read the first rows of letters—$\frac{5}{35}$ for instance—claiming not to be able to read more. Now by turning the patient around so that the test card is behind his back and looking into a mirror which is placed on the wall at half the distance of the test card so that the patient can see a reflection of the card in the mirror, he is requested to read the letters again. As he had previously read $\frac{5}{35}$ he will most likely read the same letters in the mirror. In case he does so one can be certain of simulation, as he is seeing them at twice the distance at which he first read them.—*Klin. Monatsblätter f. Angenheilkunde*, June, 1896.

The Advantages of Mule's Operation of Evisceration with Insertion of Artificial Vitreous over Enucleation of the Eyeball.—Dr. Thos. H. Bickerton makes a strong plea for evisceration as a substitute for enucleation of the eye. He tabulates the advantages of Mule's operation as follows: Enucleation: (1) Complete removal of globe and its contents. (2) No stump and therefore sunken eye. (3) Disturbance of all muscular relations and arrest of movement. (4) A fixed staring eye attracting attention. (5) Patient shuns society. (6) Arrest of development of orbit in case of children. *Versus* Mule's operation: (1) Retention of the framework of the eye. (2) A firm round globe forming perfect support for artificial eye. (3) Perfect harmony of muscular movements retained. (4) Fitted with selected eyes defies detection. (5) No qualms as to personal appearance. (6) No interference with growth of orbit. The author gives the following rules to be obtained to insure the best results: (1) To dissect the conjunctiva from its sclero-corneal attachment back to the equator. This allows the conjunctiva to be easily brought forward at the termination of the operation. (2) To remove the cornea by transfixing with a Beer's knife, and to complete the section with the same knife, taking care that the incision lies entirely in the sclerotic. (3) After careful removal of the globe, to scrape well with a specially devised scoop the ocular termination of the optic nerve. This tends to arrest bleeding from the central artery. (4) Arrest hemorrhage either by Mr. Brudenell Carter's ingenious bulb inflator, or by packing with sterilized gauze, or by free injection by means of Higginson's syringe into the globe of perchloride lotion 1:5000. (5) To introduce the artificial vitreous, divide the sclera vertically, horizontally, or obliquely, as circumstances, such as perforating wounds of the eyeball may necessitate, and taking care that the glass ball when *in situ* enables the edges of the sclerotic to come into apposition without undue tension. (6) To apply the sutures carefully and closely, the projecting angles at each end of the wound being first cut off. The author uses, with satisfaction, chromicized catgut. (7) To stitch the conjunctiva carefully over all at right angles to the sclerotic wound. During the whole operation the parts are frequently syringed with perchloride lotion by means of a Higginson's syringe. The pain and swelling are often severe during the first few days after the operation. The pain should be relieved by an opiate when necessary. The author advises dressings of compresses frequently wet in iced perchloride lotion, with or without lead and opium added. The patient is usually kept in bed ten days, and the eyes kept as quiet as possible. In none of the 40 cases upon which he has operated has suppuration occurred.—*British Medical Journal*, September 26, 1896.

Practical Suggestions on Precision in Squint Operations.—DR. P. W. MAXWELL gives the following rules to guide one in operating for squint: (1) The angular measurement of squints is to be preferred to all others as being the most accurate. The angle gamma should also be measured, otherwise the exact reduction required cannot be known. With young children who will not sit still at the perimeter Priestly Smith's tape measurement may succeed. (2) The refraction and vision of each eye should be ascertained, and the immediate effect of glasses on the long and prox. angle, and on the vision, should be noted. If there is any doubt about the refraction, atropine should be used. (3) Where time can be spared, glasses of full correction should be ordered for constant use for about two months. If the patient cannot relax for distance, atropine should be used till he can. (4) If after two months of glasses the squint, including the angle gamma, is reduced below 8°, a more extended use of glasses should be tried, and orthoptic exercise employed. But if from 8° to 20° of squint remain, a single tenotomy should be performed with more or less free division of side attachments. If the result is pretty near the full correction the patient should be seen for a week at frequent intervals. The glasses being taken off, or left on for even a day, makes a difference in the final result.

When an operation is performed on one who has not previously worn glasses a too small result may be increased by their aid, but a too great result cannot be remedied. It is a matter of clinical observation that in a case where glasses have already produced their full effect, they will again, after operation, produce a further reduction. Therefore, the patient who has worn glasses before operation has this advantage, that by continuing to wear them, by having their strength reduced, or by stopping them altogether, he can have the operative effect increased or diminished. (5) No second operation should be performed for at least three weeks. If, after the first operation 10° or more remain, a tenotomy on the other eye should be performed, and subsequently regulated by glasses. As the average effect of two consecutive tenotomies, and of a tenotomy and advancement are the same, it is a matter of taste which plan is adopted in squint between 20° and 25°. When outward movement is restricted, the anthor prefers an advancement. Where the squint is more than 25°, a tenotomy and more or less extensive advancement should be performed, for though two consecutive tenotomies might suffice, yet they might not. Any remaining squint, if between 8° and 20°, should be treated by a simple tenotomy, and if over 25°, by tenotomy and advancement. (6) It is to be noted that these suggestions apply to cases that have worn glasses. If glasses have not been worn, we must be considerably more cautious. (7) The cases which wear glasses permanently seem to obtain a greater improvement in vision, and on the whole to give better ultimate results. Glasses should be discarded only where the ametropia is slight, and the refraction of the two eyes does not differ more than 1 D. They should be worn permanently when the convergence is too slight for operation; where the vision in both eyes is improved by them, and where the refraction of the two eyes differs more than 1 D. (8) Sutures should be boiled before use, and should not be left in much more than a week. By causing inflammatory softening, and then stretching of a new attachment, they may largely undo the benefit of an advancement.—*British Medical Journal*, September 26, 1896.

DERMATOLOGY, SYPHILIS AND VENEREAL DISEASES.

Creasote in Gonorrhea.—ASMUS (*Meditzinskoie Obozrenie*) reports 58 male cases of acute gonorrhea successfully treated with injections of from 2 to 10 per mille emulsion of creosote. The discharge quickly decreased, became mucoid, and then ceased altogether. The patients recovered more rapidly than under ordinary methods of treatment; complications developed but rarely, and no relapses occurred. In addition, creasote seemed to exercise an anesthetic action on the urethral mucous membrane.—*British Medical Journal—Therapeutic Gazette*, October, 1896.

A New Case of So-called Folliculitis and its Possible Relation to Tuberculosis.—According to HALLOPEAU and BUREAU, this affection is clinically characterized by the appearance in the deeper portion of the dermis of small nodules, which soon project and are surmounted by a vesico-pustule, which ruptures and gives rise to a central umbilication. Their principal seat is the dorsal surface of the arms, particularly in the region of the joints. They leave cicatrices which are at first shiny, distinctly round or oval, and pigmented in the beginning, but afterward pale. The authors report a case in which there was both pulmonary and ganglionary tuberculosis; one of them has also seen this eruption in coëxistence with erythematous lupus, the lesions of which were confounded with those of the folliculitis. Tennyson has twice seen the latter affection in connection with lupus; there would thus appear to be a genuine foundation for the assumption of the tuberculous nature of this dermatosis, which constitutes a clearly differentiated clinical type.—*Universal Medical Journal*, December, 1896.

Bimanual Examination of the Bladder.—HENRY MORRIS emphasizes in the *Lancet*, the diagnostic value of bimanual examination of the bladder under ether. Naturally, such examination can be more properly carried out in the female than in the male, but as digital exploration of the female bladder is a still more satisfactory, and yet entirely safe procedure, it is in the male that bimanual palpation finds its chief place, and especially in those cases where, on account of hemorrhage, a satisfactory cystoscopic examination is not possible. He cites three cases, two of papilloma and one of ulcerated cancer of the bladder, in which, under an anesthetic, with one finger in the rectum and the other pressing the previously emptied bladder into the pelvis, he was enabled to make a correct diagnosis. The cancer felt like a small, hard, flat mass about the prostate and a little to one side. The papilloma had a spongy feel. Suprapubic cystotomy was performed in each case. In not one of the three cases had Morris been able to make out anything abnormal by rectal examination alone without anesthesia.—*Medical News*, December 19, 1896.

MATERIA MEDICA AND THERAPEUTICS.

By WM. WATT KERR, M.A., M.B., C.M., Professor of Clinical Medicine, University of California, San Francisco.

Diet in Epilepsy.—DR. HAIG contributes an article to *Brain*, which deals with the effects of diet and drugs in epilepsy, which, he thinks, are due to the differences they produce in the excretion of uric acid. Dieting in epilepsy is an old therapeutic measure which has probably often a distinct influence in individual cases, depending on various idiosyncracies of which we know little; although it must be confessed that some authorities have met with people in whom a strict diet seemed to increase the number of fits. The object of this mode of treatment is to cut off the nitrogenous foods, and so limit the amount of uric acid in the system. Dr. Haig thinks that this treatment has been a failure only because it has not been carried far enough, and he quotes a number of cases to show how many uric-acid-forming compounds may be contained in a diet which at first sight appears to contain very few. Without going so far as to believe that uric acid and epilepsy are in such direct relations as cause and effect, which is the view Dr. Haig holds, it is still conceivable that in predisposed persons an excess of uric acid in the system might act as the exciting cause; and so, therefore, in many cases it might be worth while to try the effect of such a strict diet as Dr. Haig advocates, in the hope of at any rate diminishing the number of fits.—*Lancet.*

Points in Dispensing Calomel.—DRESCHER tells us in the *Medical Record* that for years all of us have dispensed calomel together with "cane-sugar' in the form of powders, and no fault may have ever been found with this combination. Within the last few years it has been found by many of our physicians to be necessary to follow the "progressive line"—that is, to change the "old-fashioned" cane-sugar to milk-sugar, in the case of admixture with calomel, and even with more delicate and more easily decomposable chemicals.

"Milk-sugar fame" came from abroad, and we here naturally ape European fashion, whether rightly or wrongly. In the writer's experience calomel and milk-sugar, safely ensconsed in a good powder-paper, as is the common practice among pharmacists, will not keep so long as a mixture of "cane-sugar" and calomel, without showing signs of decomposition (turning gray). This is generally not noticed because of the large quantity of sugar of milk present, the excess hiding the discoloration; but when small amounts of sugar of milk are wanted with calomel, so that the powder can be placed dry upon the tongue or into the mouth of a small child, the metamorphosis of the calomel can be easily noticed before the administration of the dose. Quite recently a graduate of pharmacy asked the writer to account for the "black streaks" in the mortar in which he had been triturating calomel with sodium bicarbonate. He knew well enough that sodium carbonate, heated with certain metallic salts, effected reduction, but of its effect in the cold, or that of the bicarbonate, he had no idea. The same thing happens to us almost every day, when we triturate calomel with sodium bicarbonate to form "tablets." The reaction is simply this:

$$Hg_2Cl_2 + 2NaHCO_3 = Hg_2O \times 2NaCl + H_2O + 2CO_2,$$

and the tablets turn gray. In mixing powders we had the chance of pulverizing finely each ingredient in the mortar by itself, and then mixing them all together upon paper with a spoon or spatula; but tablets must be moistened, even if only with alcohol and a little water, in order to bring the particles more nearly together. The alcohol cannot be supposed to act in the case, conceding to it all its powers of affinity.—*Therapeutic Gazette*, December, 1896.

Fatal Case of Poisoning with Iodoform.—In *La Presse Médicale* we find an abstract of an article from the *Revue Médicale de la Suisse Romande*, in which the author reports the case of a woman in good health who died of iodoform poisoning. On the left leg there was a small varicose ulcer which had been dressed with iodoform powder. After this treatment tumefaction set in and the leg became red and painful, and at the end of eight days there was a generalized eruption which was manifestly due to the action of the iodoform. On the legs, the thighs, and the body, the exanthem was like that of measles; on the arms and the buttocks it was characterized by a very diffuse scarlatinous redness. On the red ground of the eruption there was a great number of small miliary vesicles, which were detached and contained a lemon-colored liquid. The patient suffered greatly; her face was red and tumefied, and there was profuse lacrymation, but no fever. The general condition rapidly became worse; the face grew pale and drawn, and in 24 hours 210 grains of albumin were found in the urine. Dyspnea and weakness became progressive, and in 20 days after the onset of the symptoms death occurred. Some years before, says the writer, the patient had had a similar eruption, which had appeared after the employment of an iodoform dressing.—*British Medical Journal*, October 17, 1896.

Cholagogues.—DR. E. STADELMANN (*Berliner klin. Woch.*) thus classifies the so-called cholagogues: (1) Substances having no true cholagogue action: bicarbonate of sodium, chloride of sodium, sulphate of sodium, etc. (2) Drastic substances, having no assured cholagogue action and often diminishing the biliary secretion: gamboge, jalap, aloes, scammony, senna, calomel. (3) Substances diminishing the biliary secretion more often than they increase it: alcohol, olive oil. (4) Substances certainly diminishing the biliary secretion: atropine, pilocarpine(?). (5) Substances having a doubtful cholagogue action: antipyrin, acetanilid, caffein, diuretin, santonin, Durand's remedy. (6) Substances which are cholagogue: salicylate of sodium, bile.—*Medical Record*, December 5, 1896.

Cocaine Poisoning: Magnan's Symptom.—RYBAKOFF, of Moscow, insists on the diagnostic value of the symptom of chronic cocaine poisoning described by Magnan—*i.e.*, an hallucination of common sensation. The patient complains of feeling some foreign body under the skin. In some cases the foreign bodies felt were like grains of sand, in others slightly larger; generally they were described as more or less rounded, and gave rise to complaints of microbes, worms, crystals, etc., situated just under the skin. While other symptoms of chronic cocaine poisoning occur also in alcoholism and with other poisons, Magnan's symptom seems to occur only with cocaine. It has, therefore, a real diagnostic value, especially in cases in which the patient is unwilling to admit having used cocaine. Where cocaine is extensively used in surgery and dentistry, the appearance of Magnan's symptom is a valuable indication for the immediate cessation of the drug. Korsakoff reported a case in which a woman, suffering from multiple neuritis, complained of "worms in the skin." On inquiry it was found that vaginal tampons containing cocaine had been freely used. The omission of these was followed by amelioration of the symptom. —*Neurol. Centralbl.*—*Universal Medical Journal*, November, 1896.

MEDICINE AND PATHOLOGY.

By ALBERT ABRAMS, M.D., Professor of Pathology, Cooper Medical College, San Francisco.

Puncture of the Vertebral Canal.—The observations of LENHARTZ include 85 cases and 150 punctures. Unlike other observers, he has attained favorable results not only in diagnosis, but in treatment. According to him, this method deserves more extended trial, especially as it is unattended by evil effects. The point of puncture is rarely evident, even in cadavers. In all his cases the site of puncture was in the median line between the third and fourth lumbar vertebræ, the patient adopting the lateral posture; with children no difficulty was experienced, but with adults the operative procedure was different. At times obstruction of the canula with blood coagula occurred, a condition which might be overcome by means of a fine wire, or by careful suction. The percentage of albumin in the fluid withdrawn varied; in inflammatory processes it was as high as 9 per cent. Sugar was never found. The sp. gr. represented an average of from 1003–1005. There was no parallelism between the percentage of albumin and the sp. gr. The results in the individual diseases were as follows: (1) Tuberculous meningitis, 14 cases, all of which died. The quantity of fluid withdrawn varied from 25 to 100 c.c.m.; the sp. gr. 1003–1010. Tubercle bacilli were found in only 1 case. Aside from the diagnostic value in these cases, a few of the patients were temporarily benefited, and in one of these cases, to relieve pressure, permanent drainage was attempted. (2) Brain tumor, 4 cases, without appreciable benefit. One of the cases died in about 7 hours after the puncture. Death, however, must not be attributed to the puncture, as sudden death is not an infrequent occurrence in such cases. (3) Chronic apoplectic conditions. In one case considerable pressure was present, although as a rule pressure was not great even in recent cases of apoplexy. (4) Chronic serous meningitis. Eight punctures with relative good results; one of the patients, a girl, 23 years of age, entered the hospital in a lethargic condition. Four hours after the puncture she became clear, then violent headache occurred, which disappeared after a second puncture, the case finally getting well. (5) Acute non-tuberculous inflammations. Three cases of epidemic neck tetanus, with considerable hemorrhagic and purulent exudate. In these cases a certain diagnosis was established by demonstrating the presence of intracellular diplococci. In a fourth case the exudate was sterile, although at the necropsy streptococci were found. The cause of the affection was undoubtedly a previous empyema. All the cases died. In one case, the withdrawal of 80 c.c.m. of fluid did not influence the coma. Five cases of acute serous cerebro-spinal meningitis. Withdrawal of considerable quantities of fluid, with good results. In one case the temperature fell after the withdrawal of 30 c.c.m. of fluid, and a second puncture was followed by cure. The author mentions the case of a healthy woman who suddenly fell while in company, and rapidly become comatose, with an irregular and slow pulse. After withdrawing 30 c.c.m. of fluid there was subjective improvement, with a pulse which became regular and less slow. The old condition recurring repeated punctures were made, eventuating in recovery. (6) Sinus thrombosis in chlorosis in two cases. In these cases, following thrombosis of the femoral veins, the fluid was under an enormous pressure. Both cases were cured after puncture.—*Therapeutische Monatshefte.*

The Relation of Neurasthenia to the Uric Acid Diathesis.—DR. PUTZAR, in a contribution on this subject, maintains that neurasthenia is dependent on an intoxication with certain metabolic products, which have undergone only an incomplete oxidation. Based on certain observations, he recognizes the following types of neurasthenia dependent on a uric acrid diathesis: (1) Neurasthenia in individuals with an hereditary predisposition to the uric acid diathesis, observed in patients usually between the ages of 20 and 30 years. (2) Neurasthenia in consequence of acquired uric acid diathesis, so-called intoxication neurasthenia, dependent on general obesity, plethora abdominalis, alcoholism, plumbesia, diabetes mellitus; observed between the ages of 30 and 40 years. (3) Neurasthenia with idiopathic renal changes, particularly frequent after psychical depression, loss in weight, defective assimilation (inanition and chronic dyspepsia) attended by oxaluria, uraturia, and phosphaturia. (4) Cases of neurasthenia with arthralgias and without characteristic renal changes (so-called nerve gout of the older writers), namely, podalgia, arthralgia, lumbago, and cephalalgia. The latter is frequently located in the atlanto-occipital articulation and the sutures of the occiput. In one case, noted by the author, where the uric acid sediment suddenly disappeared, cardiac dyspnea and increased respirations supervened. He has also noted a recession of the neurasthenic symptoms after increased excretion of uric acid in the urine.—*Therapeutische Monatshefte*, August, 1896.

Formaldehyde in Pathological Work.—Formal or formalin contains 40 per cent. of formaldehyde. Formal, according to Orth, is a good hardening agent for most tissues, especially for the brain and red corpuscles which it preserves and fixes. For microscopic purposes, Orth employs a 10 per cent. solution of formal in Müller's fluid. After 2 or 3 days this solution becomes dark, and in 4 days a crystalline deposit forms. Small pieces of tissue measuring $\frac{1}{3}$ to $\frac{1}{2}$ cm. in thickness, are completely fixed and hardened in a warm chamber in 3 hours. Large pieces remain over night. After removal from the solution, the specimen is washed out with water, after which it is placed in 93 per cent. alcohol. Carmine preparations, hematoxyline and methylene blue are excellent staining reagents. For the preservation of tissues for demonstration purposes, 1 per cent. formal is useful. Formal is a disinfectant and deodorant, and is useful for washing the hands after autopsies.—*Berliner klin. Wochenschrift.*

The Etiology of Serous Pleurisy.—ASCHOFF, based on a study of 200 cases, clinically and bacteriologically, formulates the following conclusions: (1) Serous effusions are almost always free from pus-producing organisms. If they are present, the effusion, as a rule, becomes purulent, except when pneumococci are present. (2) Purulent exudates may heal without operation. (3) The occurrence of isolated pleurisies of rheumatic origin is doubtful; at any rate it is infrequent. (4) Pleural effusions in acute rheumatism are, as a rule, complicated with affection of the heart. (5) Salicylic acid is of no special value in the treatment of serous pleurisies. (6) The so-called idiopathic cases usually arise from tuberculois. They may recover.—*Zeitschrift f. klinische Med.*, Hft 5 and 6, 1896.

Fluctuation in Pleural Effusions.—TRIPIER sometime ago directed attention to fluctuation phenomena in pleural effusions, which received inconsiderate attention by the profession. Bard again directs attention to the phenomena. Fluctuation waves may be detected either with one or both hands. In the former case the hand practises both percussion and palpation over the base of the thorax behind. The percussion blow must be light and not followed by withdrawal of the hand, which remains firmly without pressure, applied to the skin. When both hands are employed, one is placed behind and a little to the side of the chest, while the chest is percussed lightly in front with the palmar surface of the extended fingers. If the percussion blows are sufficiently rapid, a sensation of trembling is felt, which is claimed to be easy of recognition. The fluctuation sign is said to be of great value, especially in differential diagnoses.—*Boston Medical and Surgical Journal*, October 8, 1896.

The Antitoxin of Diphtheria.—The report on antitoxin issued by the London "Metropolitan Asylums Board," does not appear to support the more extravagant anticipations of those who thought that in antitoxin we had obtained an absolute antidote to the disease. The report confirms the hopes of those who have all along recognized that the antitoxin could only influence the diphtheria bacilli and their products, and would not be expected to prevent the natural sequel of such phases of the disease as had already run their course, or counteract complications caused by the intrusion of other and quite different microbes. It is to be noted that the antitoxin was not used in every case admitted, and the results, therefore, are somewhat difficult of interpretation, but when we see that only about two-thirds of the cases admitted were so treated, and yet that the general average mortality in the hospital fell from 29.6 per cent. in 1894 to 22.5 per cent. in 1895, we must admit that some very potent influence had been at work in 1895, the year that antitoxin was used, in reducing the death rate. It is when we look at the distribution of the cases according to age and according to the day of the disease on which they came under treatment, that we see most markedly the benefit of the treatment. The younger the patient and the earlier the treatment was undertaken, the greater was the proportionate lessening of the mortality. Thus, still for the purposes of comparison, taking the whole number of cases admitted in the years 1894 and 1895, the mortality of cases under 3 years of age was 47.4 in 1894 and 34.2 in 1895, showing a lessening to the extent of 13.2 per cent., while the lessening in the mortality in cases over 15 years of age amounted to 1.3 per cent. The advantage of early treatment, before complications have arisen, appears to be most marked, the cases treated on the first day showing a mortality of only 4.6 against 14.8 among those which did not come under treatment until the second day of the disease. Perhaps this is the reason for the very extraordinary and unexpected diminution in the mortality of the cases of post-scarlatinal diphtheria since antitoxin has been used. Diphtheria occurring after scarlet fever has always been most fatal. The average mortality among such cases for the past four years having been as high as 61.9 per cent. At the same hospital, however, amid the same surroundings, and with cases of apparently the same type, the mortality during 1895 fell to 3.3 per cent. This prodigous reduction can only be put down to the use of antitoxin, and we may fairly believe that a good deal of this marked excess of efficacy at this hospital over that obtained at the others, was due to the early exhibition of the remedy, as these post-scarlatinal cases, occurring among patients already in hospital and under observation, would in all probability come under treatment at an earlier date than ordinary cases brought in from outside.—*Chicago Clinical Review*, May, 1896.

Bacteriuria.—This subject is one quite novel in medical literature. It was first described by Roberts, in 1881, and has been seldom referred to, according to DR. HERMAN GOLDENBURG, by American writers. Bacteriuria is characterized, as the name implies, by bacteria in the urine. But not every case with bacteria in the urine can be classified under this term. *Sensu stricto*, the latter applies only to those cases in which the freshly voided urine contains a large number of bacteria. The urine is always cloudy, opalescent, and has a peculiarly disagreeable odor. The reaction is acid or neutral, and, if it is alkaline, there is some other cause at work. The cloudiness does not disappear on boiling nor after the addition of a mineral acid. The urine does not become clear on filtering with the ordinary filtering paper, but it does so after passing it through a Pasteur filter or by shaking it with calcined magnesia (Salkowski) or carbonate of barium (Ultzmann). When the urine is properly filtered, it does not become opalescent either on boiling or on addition of an acid, if the case is not complicated by bladder or kidney trouble. For microscopical examination a drop of aniline violet is to be added to a drop of urine on a slide, heated for a short time, allowed to cool, and afterward examined with oil immersion. Examination will then reveal an abundance of microörganisms of different shapes and sizes, such as the ordinary bacterium termo, the bacteria of internal fermentation, cocci, and bacilli. In 8 cases Krogius found the bacterium coli commune in pure cultures, and it seems that this bacillus is the most common cause of the disease. Formed elements are absent if the bacteriuria is not complicated by an affection of the urethra, bladder, or kidneys. There are no subjective symptoms; the odor of the urine is the only thing that draws the attention of the patient to his ailment. The bacteria enter the urine either through infection, as the introduction *per urethram* of bacteria into the bladder, especially by unclean catheters, or from auto-infection. The author then presents the history of a case, showing infection to have arisen from the intestines. Cure was attained by enemata.—*Medical Record*, August 15, 1896.

MENTAL DISEASES AND MEDICAL JURISPRUDENCE.

By A. W. HOISHOLT, M.D., Assistant Physician, State Asylum for Insane,
Stockton, Cal.

Treatment of Symptomatic Attacks of Sleepiness.—DR. A. ROBIN reports the history of two cases, in which the most prominent, and perhaps the only subjective symptom consisted of an uncontrollable tendency to sleep (narcolepsia, "maladie de sommeil"). The first case was observed in a woman, 35 years old, who had complained of periodical attacks of lumbago, headache, general malaise, etc., in whom afterward frequent, sudden, and uncontrollable desire to sleep took the place of sleeplessness. Besides these symptoms, oliguria and dysuria was present at each "crise neurasthénique;" the urine was pale, cloudy, contained some albumin, and an increased quantity of phosphates. The writer made the diagnosis of "albuminurie phosphaturique pseudo neurasthenique." After proper treatment, the narcoleptic attacks disappeared with the other symptoms. The second case was that of a physician, 35 years of age, in whom an excessive corpulency had quickly developed. Gradually and with increasing frequency narcoleptic attacks set in to such a degree, that the patient, in spite of his resistance, fell asleep wherever he happened to be. At the same time a nocturnal sleeplessness was present. The patient fell asleep in his carriage, even if the ride lasted but two minutes; he could not sit down during visits to his patients for fear of falling asleep; he had to do auscultation quickly, because the stooping posture increased the desire to sleep; could read or write but few words; would fall asleep while eating or drinking, so that the fork or glass would fall out of his hand; even while walking would he fall asleep, run against lampposts, etc.; he frequently would lose his way, would hear himself snore while walking, and would then try to wake up, but without result. Once, while talking with a patient in the hospital, he fell forward on the bed asleep. His sleep at night was very bad, he would wake up every half hour, was very restless, and very frequently fell out of bed. The objective examination showed a body weight of 132 kg. (291 lbs.), the face cyanotic, and respiration difficult on account of a slight pulmonary edema, pulse small and intermittent, no cardiac valvular lesion. The urine appeared to be normal. The patient had never taken liquor to excess. As soon as proper treatment was instituted against the obesity, there was a quick improvement in the symptoms. —*Bull. génér. de Thérapeut.—Centralblat f. innere Med.*

Insanity Following a Burn ot the Head.—DRS. BOURNEVILLE and TISSIER report the case of a boy admitted to the asylum when 16 years of age. A normal mental development appears to have been present during infancy up to the age of 18 months, when the child received a severe burn of the entire one side of the head and face, which led to a suppuration lasting more than three years. When he was about 5 years old, peculiarities of ideas gradually developed. A weakness of the intellect was observed. The boy, who originally was good-natured and easily managed, began to have spells of anger, bordering on maniacal attacks. After the patient had remained in the hospital about a year he was taken sick with typhoid fever and died. At the autopsy it was found that the cortex of all the cerebral lobes had remained stationary at a very early stage of development; it was rich in cellular elements. The ganglion cells were all of the same type, the pyramidal form of cells was absent. A colloid degeneration of the thyroid gland was found, but nothing was discovered which would point to a connection of the burn with the mental disturbance. This etiological connection was furthermore rendered doubtful by the fact that the boy was a twin and his birth a month premature, and, as the autopsy revealed, that there was an arrest of the embryological development of the brain.—*Progrès Med.—Centralblatt f. innere Med.*

Speech-disturbances Characteristic of General Paralysis.—DR. E, TRÖMMER has made extensive and careful observations on this subject, and has found that no form of literal or syllable-ataxic aphasia is pathognomonic of dementia paralytica with the exception, perhaps, of cases of marked syncopia (contraction of an entire word into an unintelligible sound or syllable). He concluded, however, that a symmetrically coarse or fine tremor of the upper lip while speaking, together with hesitation and atactic dysarthry, was not characteristic of any other chronic disease-process.—*Arch. f. Psychiatrie u. Nervenk.—Centralblatt f. inn. Med.*

The Changes in the Lungs after an Attempt at Suicide by Drowning.—DR. RUNGE reports a case of aspiration-pneumonia after an attempt at suicide by drowning, which terminated fatally in 4 days. Microscopically it proved to be the fibrino-catarrhal form, in which were found various kinds of germs, such as strepo and staphylococci, bacterium coli, and to some extent, also, proteus vulgaris and bacillus subtilis. The pneumonia began in the left lower and right middle lobes, and gradually extended until it took in almost the entire left lung and the lower lobe of the right lung. The results of the pathologico-anatomical and bacteriological examination shows a direct etiological connection with the aspiration of water from a river in the neighborhood of a large city. A subpleural penetration of water, similar to the one demonstrated by Paltanf, in experiments on animals, was, in all probability, the origin of the pneumonia, as two small abscesses were found in the immediate neighborhood of the pleura in the posterior and lower part of the left lung, in which locality the first signs of the pneumonia were discovered, and where, at the same time, a pleurisy developed. The usual seat of aspiration-pneumonic infiltration met with in the insane, in persons during extreme somnolence, and during narcosis, are found in the central parts of the lungs and in the lower lobes. In the above case, the changed respiration in death by drowning is probably the explanation of the modification in localization, just as the spasmodically obstructed respiration in diphtheritic patients causes a predilection of the lobular pneumonic processes for the upper lobes of the lungs.—*Fortschritte der Medicin.—Centralblatt f. innere Medicin*, September 12, 1896.

Consent of Widow Necessary to Authorize an Autopsy on the Body of her Deceased Husband.—MR. LORENZO D. BULETTE, of Philadelphia, reports the case of Foley *vs.* D. 37 N. Y. S. 471 (1896), in which the complaint sets forth that the plaintiff's husband fell through an elevator shaft in a building in the city of New York, and was taken in an unconscious condition to Bellevue Hospital, where he died three hours after his admission; that the plaintiff had applied at the hospital for his body and had begged and implored those who were in charge of it not to allow or permit an autopsy to be performed, and had given notice that she would immediately send an undertaker for the body to remove it to her home, where it would be prepared for burial. Notwithstanding her request and protestations, the defendant, without her knowledge or consent, allowed an autopsy to be performed on her husband's body. The complaint also stated matter intended to be in aggravation of damages, and ended with a demand for a money-judgment. The case came before the Appellate Division of the Supreme Court of New York on an appeal from a judgment overruling a demurrer to the complaint. The inquiry involved the question, for the first time presented to the Court, whether the defendant was liable civiliter, and to the wife, for the unlawful dissection of the remains of her husband. The defendant advanced two objections in his demurrer: (1) That if any one may bring an action of this kind, it must be the next of kin, and not the widow. (2) That there is no such thing as property in human remains, and consequently no right of action in any one for their mutilation. After carefully considering these objections and citing cases in point, Mr. Justice Patterson rendered the opinion that a surviving wife is entitled to the possession of the body of her deceased husband in the same condition as when death occurred, for the purpose of giving it proper care and burial, and she may sue for damages a physician or other person who without her consent, unlawfully or wantonly dissects or mutilates the body before burial.—*International Medical Magazine.*

FORMULÆ.

By H. E. SANDERSON, Ph.B., M.D., Assistant Physician State Asylum for Insane, Stockton, Cal.

Epilepsy:

Codeinæ.................. ʒi
Potassii bromidi.......... ℥ii
Infus. adonidis vernalis... ℥iv

S.—Half to one teaspoonful, three times a day.—*Gaz. Hebd. de Med. et de Chir.—Med. Record.*

Painful Digestion, with Flatulence:

Sodii bromidi.........16 parts
Pepsin. concentrat. ..12 parts
Pulv. carbo. ligni.... 8 parts
Aquæ.................32 parts
Glycerini.............96 parts

S.—Teaspoonful after each meal.—*American Journal of Surgery and Gynecology.*

Diabetes:

Arsenate of sodium...1 grain
Carbonate of lithium..1 drachm
Codein...............3 grains
Ext. of cinchona.....½ ounce

S.—Divide into 30 cachets. Take 1 twice a day.—*Journal des Praticiens.*

Chromic Acid for Intertrigo and Hyperidrosis.—BRAULT recommends, in the *Medico-Surgical Bulletin*, 3 per cent. chromic acid, to be painted on the cleansed and dried surface. To be used every three or four days, and followed by some inert powder.

Pityriasis Capitis:

Hydrarg. ammoniat........ ℈i
Ungt. petrolei............ ℥i

S.—External use.—*Medical and Surgical Reporter.*

Hyperidrosis of Feet:

Liquor ferri chloridi..... ℥i
Glycerini................. ʒiis
Olei bergamot. .... ʒv

S.—Apply with brush.—*Deutsch. Med. Woch.—Med. Record.*

Vaginal Injection for Leucorrhea.

Tannin .... 6 parts
Alcohol.
Creasote.. ...of each 3 parts
Aqua ....24 parts

S.—Tablespoonful to a quart of warm water. Inject three times daily.—*Revue Internat. de Med. et de Chir.—New York Med. Journal.*

Ichthyol in Blepharitis:

Ichthyol.......10 to 15 parts
Lanolin.............100 parts

S.—For inflamed eye lids.—*Gazet. degli Ospedali—British Med. Journal.*

Infantile Colic.—Tinct. of lobelia. One drop in an ounce of water, and give half teaspoonful, warm, repeating according to necessity. Sometimes doses of one or several drops are required.—*Medical Age.*

Psoriasis:

Ichthyoli	ʒi
Acid. salicylic.	℈i
Zinci oxidi	ʒii
Amyli	ʒiv
Petrolati	℥i

Sig.—Apply twice a day.

—*Am. Medico-Surgical Bulletin.*

Asthma Cigarette Paper:

Sodii arseniat.	20 parts
Extract. belladon.	50 parts
Extract. stramonii	50 parts

M. and dissolve in a little water.

Sig.—Soak in the solution bibulous paper and let it dry.—*Nat. Druggist.*

Hyperidrosis:

Balsam Peruvian	1 grammes
Acid formic	5 grammes
Chloral hydrat	5 grammes
Alcohol	100 grammes

—*Am. Medico-Surgical Bulletin.*

Bedsores:

When the skin first reddens, apply nitrate of silver solution, 20 grains to the ounce.—*N. Amer. Practitioner.*

Fissure of the Anus:

Ext. cicuta	5 parts.
Castor oil.	15 parts.
Lanolin	30 parts.

—*Révue de Thérapeutique.*

PUBLIC HEALTH.

By W. R. Cluness, M.A., M.D., San Francisco, Cal.

Mortality for November, 1896.—The deaths registered in 49 town districts of the State, during the month of November, in a population of 737,180, correspond to an annual rate of 14.64 a thousand, the total mortality having been 899. 72 deaths were due to zymotic diseases, giving an annual rate of 1.11 a thousand. Of these, 9 were due to diphtheria, 9 to cholera infantum, 19 to typhoid fever, 5 to diarrhea and dysentery, 12 to cerebro-spinal fever, 2 to whooping cough, 6 to croup, 5 to intermittent and remittent fevers, 4 to scarlet fever, 1 to measles, and 0 to small-pox. 241 deaths resulted from diseases of the respiratory organs, giving an annual rate of 3.84 a thousand. Of these, 130 were due to consumption, 88 to pneumonia, 21 to bronchitis, and 8 to pulmonary congestion; the rate being, for consumption and pneumonia, 2.04 and 1.32, respectively. 72 deaths resulted from diseases of the heart, 5 from alcoholism, 3 from erysipelas, 41 from cancer, and 391 from causes not given. The average annual death rate from all causes occurring in the ten largest cities and towns in the State, and representing a population of 618,000, was 15.00. The highest rate for the month occurring in cities having a population of 10,000 or more inhabitants, was reported from Fresno, the lowest from San Diego.

METEOROLOGY.

Summary for November, 1896—*Temperature.*—The normal temperature of the State for November is 53.4°; the average for November, 1896, was 52.0°, a departure from the normal of - 1.4°. The highest monthly mean was 70.8°, at Salton; the lowest, 30.0°, at Bodie. The maximum temperature was 97°, at Pomona, on the 15th. The minimum, 17° below zero, at Bodie, on the 27th. The absolute range for the State was 114°. The greatest monthly range was 73°, at Bodie; the least, 23°, at Point Lobos.

Rainfall.—The normal precipitation for the State for November is 2.43 inches; the average for November, 1896, was 4.12 inches, a departure from the normal of + 1.69 inches. The greatest monthly precipitation was 23.87 inches, at La Porte; the least, a trace, at Needles.

Wind.—The prevailing direction of wind was W.NW.

Unusual Features.—There was no unusual meteorological phenomenon to record during the month of November.—James A. Barwick, Director California Weather Service.

California—Tabular Statement for November, 1896.

STATIONS.	TEMPERATURE.						RAINFALL.		Mean Relative Humidity	WEATHER.			WIND.	FURNISHED BY—
	Mean	Highest	Lowest	Mean Highest	Mean Lowest	Mean Daily Range	No of Days Rain Fell	Total Rainfall		No. of Clear Days	No. of Fair Days	No. of Cloudy Days	Prevailing Direction.	
Auburn ....Cal.	51.3	68	30	------	------	------	---	10.34	------	---	---	---	S.W.	Southern Pacific Company.
Berkeley......... "	51.2	65	34	57	45	12.0	11	5.15	86	15	3	12	S.	Obs. University of California.
Colfax............ "	48.4	78	30	------	------	------	---	14.39	------	---	---	---	S.W.	Southern Pacific Company.
Coronado........ "	65.6	84	49	75	56	19.0	5	0.98	------	23	3	4	N.W.	Hotel del Coronado.
Eureka........... "	49.0	69	27	56	42	14.0	20	8.00	84	8	9	13	E.	Weather Bureau Dept. Agr.
Fresno........... "	53.0	76	29	63	44	19.0	6	1.46	74	15	5	7	N.W.	" " "
Keeler .... "	51.4	80	28	------	------	------	---	0.00	------	---	---	---	S.	" " "
Los Angeles.... "	60.0	84	37	70	50	20.0	5	1.66	72	14	12	4	W.	" " "
Monterey .... "	53.5	70	36	------	------	------	---	2.13	------	---	---	---	S.	Southern Pacific Company.
Napa........... . "	50.1	74	28	63	38	25.0	11	5.03	85	15	4	11	S.W.	Station Napa Insane Asylum.
Oakland .... "	51.0	66	33	58	44	14.0	11	6.11	84	14	7	9	N.W.	Chabot Observatory.
Paso Robles.... "	51.4	73	29	62	40	22.0	5	1.92	------	10	12	8	N.W.	Agr. Experimental Station.
Red Bluff........ "	51.0	67	27	59	43	16.0	8	3.41	66	11	6	18	N.W.	Weather Bureau Dept. Agr.
Sacramento. ... "	52.6	72	31	62	44	18.0	8	3.56	68*	13	8	9	N.W.	" " "
San Bernardino "	56.0	80	31	70	42	28.0	3	0.98	------	15	9	6	W.	A. K. Johnson, M. D
San Diego....... "	59.7	76	43	67	52	15.0	5	0.98	76	23	3	4	N.W.	Weather Bureau Dept. Agr.
San Francisco.. "	53.6	66	38	58	48	10.0	8	4.56	79	13	9	8	W.	" " "
Santa Barbara.. "	58.7	79	40	69	49	20.0	4	3.51	72	22	2	6	W.	Hugh D. Vail.
Santa Cruz...... "	52.6	73	30	64	41	23.0	8	6.79	------	20	0	10	W.	W. R. Springer.
Yuma...........A. T.	63.1	86	42	76	50	26.0	1	0.06	42	23	6	1	N.	Weather Bureau Dept. Agr.

Blank (----) indicates data missing.

* means humidity at 5 P. M.

Occidental Medical Times.

COMMUNICATIONS are invited from all parts of the world. When necessary to elucidate the text, illustrations will be furnished without cost to the author.

SACRAMENTO: JANUARY, 1897.

THE COMMENCEMENTS.

The graduating exercises of the Class of '96 of Cooper Medical College were held in the College Auditorium Tuesday evening, December 8th, 1896. The degrees were conferred by PROFESSOR L. C. LANE, and the valedictory given by PROFESSOR ADOLPH BARKAN. An address was also delivered by the REV. GEORGE C. ADAMS.

The following are the names of the graduates: Lewis Whitaker Allen, B. S., Warden Taylor Barr, B. S., Hugh Beattie, Francis Matthew Carroll, Richard Beck Chapman, Waldo Lee Cheshire, Joseph Fife, B.S., Oscar Herman Folkers, Ph.G., George Montgomery Gardner, John Henry Graves, Jonathan Green, Fred Harlan Hadley, B.A., Mabel De Lucy Hughes, John Valentine Hughes, B.A., Alpheus Howgill Julian, M.D., Ira Bourland Ladd, Charles Herbert Lowell, Hedvig Malmstrom, Patrick Joseph Mangan, Thomas Crooke McCleave, Frederick Joseph McNulty, Chas. Howard Miller, Mayela Genevieve Murphy, Ph.B., Beverly Stephen Nourse, B.A., Sidney Ernest Davis Pinniger, Robert Langley Porter, B.S., Frances Lillian Raberge, Samuel Leroy Rea, John Belcher Rogers, B. A., Fred. William Ross, Kirby Bernitz Smith, Ph.G., Ferdinand Stabel, Auren Alfred Stafford, Philip Matson Thomas, Isaac Walton Thorne, Edward Arby Trommald, Grace Rains White.

The total number of students in attendance during the past session was 204, the number of matriculates being 84.

THE DIAGNOSIS OF TUBERCULOSIS FROM THE MORPHOLOGY OF THE BLOOD.

During the last decenium, hematology has assumed an important role in diagnostic medicine. So great have been the advances made in this department of science, that hematologists have been created, whose specialty is to cope with the intricacies of this particular work. Hematic anomalies can only correctly be interpreted by one skilled in microscopic *technique*. Here, unlike other methods of objective examination, the findings must not be approximate, but conclusive. Exclusivism in diagnosis is fraught with danger, and any one who essays to arrive at a diagnosis without the aid of other methods of examination, stultifies the very method espoused. Many of the fallibilities of specialism owe their genesis to this homliy. The homogeneity of life, when resolved by the analytic methods of science, shows a manifold picture of vital expression, uniform only in its incongruity. When AUBEAU finds nucleated red blood corpuscles in conjunction with an increased number of eosinophile cells and diagnoses cancer, or when SADLER finds leucocytosis and diagnoses sarcoma, they advocate methods which have their analogue in the individual who, wishing to dispose of a horse, carried with him a brick as a sample of its architecture.

DR. L. BREMER (*Centralbl. f. d. med. Wessen*, 1894, No. 49,) describes a simplification of the method of diagnosing diabetes by examination of a drop of blood. The simplified method is a very prolix one, and it is an exhaustive defense of the diagnosis of diabetes by circumlocution. We deprecate, most emphatically, hurried diagnoses, yet there are extremes, to which some clinicians go, lacking, as they do, the inhibition of judgment. There is a physician of our acquaintance, an ultraist in diagnosis, who was called to give his opinion in the case of a child who got sick suddenly. He examined the secretions and excretions, the organs and the blood. While engaged in the examination of the latter, another physician was called, more expeditious and less scientific; he diagnosed the case as one of dyspepsia, prescribed, and the patient got well. Many of us yet remember the infallible method of diagnosing syphilis, by the examination of a drop of blood. That infallible method has been relegated to innocous desuetude, and justly so, for otherwise every patient whom we examined, would prove to be a syphilitic. LOSTORFER & STRICKER were competent scientists, yet they erred in mistaking hematoblasts normal morphologie elements of the blood for "syphilitic corpuscles." Aspirants in the realms of hematology are inconsistent.

DR. JOHN DANE, in an article (*Boston Medical and Surgical Journal*) "On the Blood in Tuberculosis of the Bones," tells us that an increase in the number of leucocytes points to the probability that there will be an abscess formation, then he goes on to say that a diminution of the number of leucocytes does not preclude the presence of an abscess. He deduces further, as a result of his observations, that a low leucocyte count generally indicates the absence, and a high count the presence of a secondary infection with pyogenic organisms. The utilitarian will seek in vain for anything definite in these deductions. Yet, the conclusions of DR. DANE are correct; fabricated observations are more consistent and unfortunately altogether too frequent.

DR. A. M. HOLMES, in a contribution entitled "The Diagnosis of Tuberculosis from the Morphology of the Blood" (*Medical Record*, September 5, 1896), is not content with establishing the diagnosis of tuberculosis from the examination of the blood, but he pursues his speculation further. He pronounces on the degree of the tuberculous condition, and on the degree of the recuperative power of the patient. DR. HOLMES is as licentious in his deductions as the ubiquitous seer who casts your horoscope from a lock of hair while you wait. DR. HOLMES in his contribution proves himself thoroughly conversant with hematology; he has mastered the subject in all its details, and his erudite article would be flawless were it not for the intrepidity of his deductions. He enunciates what he is pleased to term a fundamental principle upon which his thesis is constructed, and that is the hypothesis that every individual has a biologic prototype in the leucocytes of his own blood. He shows the physiologic analogies between the leucocyte and the individual, as manifested in growth, decay, structure, and function. He then naturally passes on to the analogy in disease.

We abstract the following summary: "That leucocytes are independent organisms, with functions analogous to those of the larger organism. That they pass through stages of growth and decay. That disintegration of leucocytes may occur at any age. That the leucocytes are tissue formers. That as are the leucocytes so is the individual. That tuberculosis is a disease characterized by tissue disintegration. That in tuberculous blood there is abundant cell disintegration, premature development, premature decay, and more or less deviation from the normal percentages of the various types of cells. That if there is marked disintegration in the leucocytes, it is with absolute certainty that we can predict a similar condition in the larger organism. That tuberculosis possesses a combination of blood appearances from which a diagnosis may be made earlier than by any other means that we now possess. That these may be recognized by appropriate micro-chemical stains and under a high power. That they can be recognized even before the disease manifests itself in the individual. That they are sufficiently marked in tuberculous persons, or even in those with a strong tuberculous predisposition, to enable a diagnosis being made from the blood alone, without knowledge of the history or physical condition. That the real source of the recuperative power is to be found in the leucocytes. That thus far no other pathological condition has been found which presents similar blood appearances. That to secure an early diagnosis would enable many to avail themselves of favorable climatic changes, and thereby delay, or even prevent, the destructive results which would otherwise inevitably follow. And, finally, that if future investigations confirm these deductions, we may look forward to a no distant day when, if we expect to detect tuberculosis in its incipiency, we must study the leucocytes."

DR. HOLMES admits that there is no single characteristic in tuberculous blood and that there is no distinct dividing line between the leucocyte in the physiologic and pathologic condition, and that experience alone will enable us to educate the eye to distinguish betweeen these varieties. This is a modest peroration to a bald Exordium. There is more in diagnosis to unlearn than to learn, and after reading carefully how to diagnose tuberculosis from a drop of blood, one yearns to learn of a reliable method in the early diagnosis of tuberculosis.

THE PHYSICIANS OF SANTA CLARA COUNTY AND CONTRACT LODGE PRACTICE.

Some time since we took occasion to comment [MEDICAL TIMES, Vol. X, p. 567] on a series of resolutions adopted by the Santa Clara County Medical Society, which were then stated to have been signed by nine-tenths of the legally qualified practitioners of the county. This excellent work has borne good fruit in that section and seems likely to be productive of permanent good, as the resolutions now have the support of every legally qualified practitioner in the county, and after a trial of some months there has been no defection from the ranks. We understand that great pressure has been brought to bear upon individual signers for the purpose of breaking down the agreement, but so far without result. A successful example of this character is worth more to the cause of protective medical organization than meetings, speeches, and resolutions that deprecate, but that do not act. There can be no valid or legitimate argument raised against such an association. It is in no sense a trust or a monopoly. It does not seek to confer an exclusive privilege or franchise upon any set of individuals. It aims to include all persons whom the law empowers to practise medicine in the State. It does not provide for an increase in fees. It specifies that only such fees as have been heretofore charged shall continue to be collected, with all the limitations which hard times, public and private charity, and human dishonesty will always place upon medical emolument.

We shall not now dwell upon the generally worthless character of so-called medical relief societies, but we desire to point out that an association of this character is formed on precisely the same lines and for practically the same purposes as are alleged to influence the unions of mechanics and laborers, whether skilled or unskilled—in other words, all men whose support is derived from their daily labor. It must always be borne in mind that the work of the physician in many of its relations, both as to labor performed and as to compensation, more nearly approximates that of the mechanic or laborer, than any other calling. In each case, compensation is for work done by brain and hand combined. In each, the remuneration is for the work performed during the day, and if there be no work, or but little work, on that day, the loss is irreparable, for that day is gone forever. The merchant who fails one day to make a sale, may succeed on another, and this is also true of those who buy and sell, or speculate in any commodity. The law and the church, and all who enjoy regular salaries, as can be seen, are also exempt, to a very great extent, but the wage earners, whether the remuneration be termed fees or wages, are all on the same plane. Support, therefore, instead of opposition should be sought amongst members of the various labor unions, who compose the great bulk of friendly societies, and we believe that this support can be obtained, in great part, if the subject be properly placed before these organizations.

NOTES.

The Journal of Nervous and Mental Disease.

The staff of the *Journal of Nervous and Mental Disease* for 1897, will be as follows: *Editors:* Dr. Chas. L. Dana, Dr. F. X. Dercum, Dr. Philip Coombs Knapp, Dr. Chas. K. Mills, Dr. Jas. J. Putnam, Dr. B. Sachs, Dr. M. Allen Starr. *Associate Editors:* Dr. Philip Meirowitz, Dr. Wm. G. Spiller. Dr. Chas. Henry Brown, of 25 West 45th street, New York, will continue to act as managing editor.

The Peculiar Position of William Wood & Co.

We are informed by Dr. George M. Gould, the editor of the *American Year Book of Medicine and Surgery*, that Messrs. Wm. Wood & Co., of New York, the well-known medical publishers, have positively refused to permit the use in the *Year Book* of any abstracts from articles or the reproduction of any illustrations from either of their journals in this work. We understand that "no other publishers in the world, not even those who pay authors for their contributions, have in the least objected to our reproduction of quotations, abstracts or illustrations from their journals." It seems to us that the position of Messrs. Wood & Co. is indefensible from any standpoint. A medical journal, and, for that matter, a medical publisher, exists solely for and by the profession. In every sense, therefore, the medical publisher's position should be one of reciprocity. The object of medical writing is the diffusion of knowledge, and to that end the early publicity of medical inventions, discoveries, new departures and such clinical facts and investigations as will be helpful to others, is very desirable. It is obvious that this result is aided by a wider publicity, and that the greater the publicity the greater the good that may be accomplished. There is another aspect, which concerns the members of the profession perhaps even more than the publishers. Every man who writes for publication does so that publicity may be afforded to what he writes, and, indirectly, that whatever may accrue thereby may be to his benefit. It will, therefore, be well for every author who sends a communication to either of Messrs. Wood & Co.'s excellent journals to bear in mind that a limitation has been placed upon the circulation of his efforts. It is true that this limitation may be at present applied only to the *American Year Book of Medicine and Surgery*, but the limitation may be still further extended. From all time, exclusive rights, patents and limitations of this character have been odious to the profession, and it does not seem that this, the end of the nineteenth century, is a fitting time to attempt the establishment of an abhorrent practice.

SPECIAL ARTICLES.

PRACTICAL DAIRY AND MILK INSPECTION AS CONDUCTED IN ALAMEDA.

In November, 1893, the Board of Health of the city of Alameda took up the matter of food and milk inspection by preparing an ordinance which the Board of City Trustees passed November 13th, 1893, entitled, "An ordinance authorizing the inspection of food and milk and prohibiting any person from selling, or offering for sale, or distributing any impure, unwholesome, or adulterated milk, cream or food, or from resisting the inspection, seizure and destruction of the same," which ordinance laid the foundation for the thorough inspection of all food stuffs, milk and its products, and all dairies supplying milk to the city. Since the passage of this ordinance the city has spared no expense in conducting a systematic inspection of all dairies supplying milk, and in the inspection of milk chemically, by the microscope and other instruments. It issues monthly a report of such inspections. The practical work is conducted as follows:

An individual physical examination of the cows at dairies. This is done by having them placed in the cow barn, where the stalls have been numbered with a piece of chalk. In about fifteen minutes after (allowing this time for the cows to quiet down) the examination is conducted as follows: The examiner and attendant, wear clothes similar to those of an ordinary milker, so that the cows will not become excited at the sight of a person dressed in clothing other than they are accustomed to see, they will therefore be much easier to handle, and will be very little disturbed. The body of each cow should be examined first, and anything that points to a diseased condition noted. The head, neck, mouth and throat are examined next, which is done by an attendant taking hold of the nose and horn. When the examination has been finished, cows against whom no notes appear are turned out, and the remaining ones gone over again carefully, when the examiner makes his diagnosis. All cattle are condemned that are suffering from a contagious disease, and all others are excluded from the herd until they have fully recovered from their ailment.

The diseases usually met with in dairy inspection are tuberculosis, actinomycosis ("lumpy jaw"), cow-pox, catarrh, aptha diarrhea, hematuria ("red water") leucorrhea, garget, mammitis, bloody milk, tumors, carcinoma, ecthyma, furunculus, laminitis ("founder"), pneumonia, bronchitis, rheumatism, and other minor troubles. Some of these conditions can be remedied in a few days by a little careful treatment on the part of the dairyman. Cows affected with any of these diseases are not allowed to be milked in the dairy while so affected.

Next in importance is the "feed" of the cows and the water they drink. The city ordinance declares it a misdemeanor for any person to bring into this city, offer for sale, exchange, or distribute milk produced from cows fed on still slops, brewer's waste, swill, or other food calculated to render the milk unwholesome, or from any cow allowed to drink any impure, putrid, muddy or stagnant water, or water which is drawn from any well within fifty feet of any cesspool, privy vault, or place where any decomposed animal or vegetable matter is kept. In examining food stuffs for cows, it is first ascertained that the pasture has no sewage running over it, and also that it is well drained. Hay is examined for mouldiness, mow-burn, smut, and mildew, all of which conditions cause derangement of the digestive apparatus, kidneys, etc. Brewers' grains and sprouts are only allowed to be fed after they have been kiln-dried and if free from mildew, and then only in limited quantities. The cereals usually fed are bran, middlings, ground barley, corn meal, oat-cake, and cocoanut-cake. Bran should have a pleasant odor, be of yellowish tint, free from dust, dirt, and not musty nor caked in masses; the same conditions may be looked for in middlings, ground barley, corn meal, oat-cake and cocoanut-cake, and should it exist to any extent, it is not permitted to be fed.

The water supply must be carefully looked into, as it cuts an important figure in dairying. This should be fresh, from springs, artesian wells, or gravel bottom creeks free from sewage. The drinking trough should be cleaned twice a week. All water should be free from organic impurities, which are detected by taking a sample, keeping it a day, and examining the sediment. It may be necessary to make a chemical or microscopical examination. A physical examination of water is made by placing a sample of the water in a tall glass vessel, say 18 inches deep. Place the vessel upon a piece of white paper, then look through the depth of water, which should have a bluish tinge. Any other marked color is readily detected. If of a yellowish tint, it is probably due to sand or clay; a brownish tint is suspicious of sewage or other organic contamination. To examine the sediment, let it stand 24 hours, then remove the clear water by syphon. The sediment may contain vegetable debris, low forms of organic life, ova of insects, parasites, etc. A microscopical examination should be made of all sediments. A wholesome water should have no odor. To detect this, heat the water. When such gases as sulphuretted hydrogen are given off, and odor becomes apparent, the geological formation and sanitary conditions at the source of a water supply suggest to the examiner a general idea as to the condition of the water obtained.

The following classification gives some idea as to the value of water from different sources: *Wholesome*—Spring water; deep well water; upland surface water. *Suspicious*—Stored rain water; surface water from cultivated land. *Dangerous*—River water to which sewage gains access; shallow well water. The water used for cleaning dairy utensils, milk cans and bottles, should also be of good quality.

The next to be taken into consideration is the general sanitary condition of the premises. Cow barns should be built with the floor 3 or 4 feet from the ground, so as to allow free circulation of air underneath. No pool of sewage is permitted under the barn. Manure must not be piled up against the barn, and ventilation and light must also be looked after; the manure pile must be at least 50 feet distant. The barn is to be cleaned out at least once a day, and twice a day when cows are kept in. Most of the barns are floored, so as to have a gutter about 14 inches wide and 4 inches deep running along behind the cows to receive the droppings and water. This saves a great deal of labor, and is much cleaner than a flat floor. When necessary sewers are put in to drain barn, milk houses, cow yards, etc. Cow yards are scraped about once a month, or oftener if necessary. A cow yard should have a grade if possible, as mud is a source of great annoyance in the winter time in a flat cow yard. The milk house must be at least 50 feet from the barn, and the milk must be immediately removed from the barn as soon as a bucket is full. Straining the milk in the cow barn is not permitted, thus preventing contamination of the milk with the gases that arise from excrement, etc. All dairy utensils, milk cans and bottles are examined, and it is well to see that a protective for the strainer of the milk tank, as a frame of wire mesh or mosquito bar, is used and kept on the top of the tank when milk is not being poured in, thus preventing the bathing of a handful of flies fresh from the manure pile with every bucket of milk.

An important part of dairy inspection is the study of the habits of the milkers and others who handle the milk. Every milker is instructed to brush off the flank and milk udder with a brush or cloth to remove any loose dirt that might drop into the bucket during milking. Wetting the hand with milk should not be tolerated. If the milker cannot milk with a dry teat, he should clean the teats and wet them with a little warm water. In the winter time it is sometimes necessary to wash the teats before milking, and when the teat is dirty the first two or three strokes should be milked on the ground, thus washing out from the opening of the teat any dirt that may have lodged there. The city ordinance provides for the "report of by the owner, agent, manager, or driver of any dairy, of the name of any person employed in said dairy, or living on said premises where said dairy is kept, who has any contagious or infectious disease." To go further, in addition to this it would be proper to have a physical examination made, by a competent physician, of each person employed as a milker or handler of milk in all dairies.

Milk inspection is practically conducted inside the city limits, although samples are also taken from the milk tanks at the dairies. An unannounced inspection is made shortly before milking time. When the milking is finished, a sample of one pint is taken and tested at the laboratory of the Board of Health for percentage of butter fats, cream, water, and solids, thus fixing a standard for the milk produced at the dairy, which might vary a fraction at different times owing to class of feed, weather, etc., which are always taken into consideration. By this test it is intended to hold the dairyman to serve the same quality of milk in the city that he produces at the dairy, allowing a fraction for loss by transportation and method of handling.

Samples of milk of each dairy are taken inside the city limits at any hour at least once a month and oftener, according to the showing of the dairy. Milk left at all restaurants is also tested from samples taken as soon as delivered. Sometimes three or four samples are taken from one wagon, and sometimes every can in the wagon is tested. This depends upon the suspicions of the inspector.

The city ordinance declares that "all milk not contained in cans plainly marked with letters at least one inch in length, "Skim Milk," which, upon analysis, shall be shown to contain more than 87.5 per cent. of water, or to contain less than 12.5 per cent. of milk solids, shall be deemed impure, unwholesome, and adulterated."

Before a dairyman can sell milk in the city, he is requested to sign a register at the health office, by which he agrees to conform to all the rules and regulations of the Board of Health and all city ordinances affecting the milk supply, whereupon the health officer issues to the party so registered a permit to sell milk for the period of one year, unless sooner revoked by the Board of Health for any violation of the health laws, etc. There is no charge for registration or permit. All persons owning cows inside the city limits, who sell milk, are subject to the same rules and regulations as the large dairymen.

In the main audience room of the Board of Health is a large blackboard painted on the wall, containing the name of each dairy supplying milk, with the sanitary condition, feed of cows, average per cent. of butter fats and cream from such dairy, and blank space for remarks. On the first of each month the inspector changes the sanitary report if necessary, also the record of food stuffs used, and places the average of all milk and cream tests made from each dairy during the previous month.

SOCIETY PROCEEDINGS.

SACRAMENTO SOCIETY FOR MEDICAL IMPROVEMENT.

Regular Meeting, November 24, 1896.

The President, F. B. SUTLIFF, M.D., in the Chair.

Election of Secretary.—The resignation of DR. J. A. NELSON, as Secretary of the Society, was accepted, and DR. F. M. REITH was elected to fill the vacancy.

DR. G. L. SIMMONS read a paper entitled "Remarks on the Health Department in our City Charter and Sanitary Interests of Sacramento." The paper, which was of purely local interest, dealt mainly with the water supply of the city, and was very generally discussed by the members present.

SAN FRANCISCO COUNTY MEDICAL SOCIETY.

Regular Meeting, November 10, 1896.

The President, WM. FITCH CHENEY, M.D., in the Chair.

New Members.—B. F. KORTZ, M.D., was duly elected a member of the Society.

The Radical Cure of Inguinal Hernia.—DR. J. COPLIN STINSON read a paper upon this subject. In deciding on an operation for the cure of inguinal hernia, the problem is to restore the structures durably to their normal position, relations, and uses. Keeping this, the true solution, clearly before us, we have the key to the situation. I believe that if these fundamental principles are adhered to in operating upon our cases of hernia, that in the immense majority the patients will be permanently cured. An operation to be followed by a permanent cure should fulfil the following conditions: (1) Cause total obliteration of the sac. (2) Allow for the safe transmission of the cord and its structures, *i.e.*, the cord should not be subjected to pressure in any part of its course, and the operation should not be followed by pain, thickening or inflammation of the cord, or in any manner interfere with its functions. (3) Not result in inflammation, atrophy, sloughing, etc. of the testicle. (4) Close durably the breach of the abdominal wall. I have already described and reported an operation that fulfils these indications and that overcomes the objections to all other operations hitherto described. The steps of this operation are briefly as follows: An incision is made parallel with, and one-half inch above Poupart's ligament from the external ring to one-half an inch above the upper angle of the dilated internal ring, dividing the skin, subcutaneous tissues, and the external oblique aponeurosis. The latter is lifted and freed from the structures beneath, till the outer border of the rectus and the shelving edges of Poupart's ligament are clearly seen. The sac is isolated, opened and the contents cleared out, removing all altered omentum. All adhesions internally and externally are separated. Next, the sac, its neck, and, as high as possible, the peritoneum contintinuous with it, are removed and the cut edges of the serosa closed with a continuous suture. The rings and canal are cleared of all masses of fat, glands and adhesions, and all such masses that bulge into the internal ring from the sub-serous tissues are also removed. Any markedly varicose veins of the cord are excised high up within the internal ring. The dilated internal ring is sutured. Commencing at the upper angle, bring the inner and outer borders accurately together, suture from above downward, leaving only sufficient room at the lower angle close to the pubic bone for the cord. The internal ring is reinforced and the canal closed by uniting the internal oblique and the transversalis and their conjoined tendon to Poupart's ligament, leaving only room enough next the pubic bone for the cord. Then suture the cut edges of the external oblique, and the pillars of the external ring which are made to snugly embrace the cord. Finally the cut edges of the skin are cut without drainage. He then discussed the dressing and after treatment, entering fully into the *technique* of special cases. The preparation of suture and ligature material was also given. The speaker mentioned that he had already reported 85 cases, and then reviewed at length the more generally employed of modern operative procedures for the relief of hernia, as Bassini's, Kocher's, Halstead's, and Macewen's, and presented the following conclusions: (1) With careful antiseptic and aseptic precautions, provided the operator is familiar with the special anatomical conditions associated, an operation for the cure of hernia has a mortality at or about *nil*, or less than that associated with the condition previous to the operation. (2) Sterilized chromicized tendon or chromicized catgut is the most suitable material for a buried suture. (3) In closing the wound it should be sutured layer by layer, separately and thus accurately, using a continuous stitch. The most suitable stitch at the present time in use is the continuous single knot or reef-knot stitch described by C. Ford. (4) In the immense majority of cases the patients are permanently cured by operation. (5) The operation I have described: (*a*) Restores the structures firmly and durably to their natural positions, relations, and uses. (*b*) Has all the advantages of the other methods of operation but none of their disadvantages.

DR. C. E. FARNUM: Success in the operation for inguinal hernia depends upon attention to a few important anatomical and pathological points, and I had hoped to hear the author dwell more upon them. He speaks of oblique inguinal hernia as when complete it usually comes down within the tunics of the cord, entering at the internal and coming out at the external ring. I have rarely seen it do this, either in the cadaver or in the subject of operation. I think the hernia less frequently enters at the internal ring and there lies within the tunic than the author would have us believe. Dr. Stinson objects to the so-called "plug" recommended by Macewen, which properly applied is not a plug, but rather a lid to a funnel. The vas deferens and vessels come together from nearly opposite directions at the internal ring, making a V-shaped funnel called the normal dimpling of the peritoneum and transversalis fascia at that point. The internal ring being restored during operation, the folded tissue and "plug" of Macewen fills the dimpling that would otherwise be left. It not only does this, but acts as a lid, projecting beyond its border, and presents a convexity inward instead of a depression, being at all times behind the internal oblique. The conjoined tendon after it has been stitched to Poupart's ligament offers resistance at a point otherwise less fortified. I cannot see how raising the internal ring to a higher level, as the author recommends, would strengthen this point in the abdominal wall or remedy the defect. I believe that Macewen's idea is correct. It is true, the internal ring being usually pulled down in the hernia to a point much below the normal, and the normal dimpling enlarged into a funnel that, raising the internal ring to the normal point or higher, will greatly strengthen resistance to subsequent hernia. I cannot, however, understand how raising the internal ring, as the author recommends, will be of any advantage in making the funnel of the fascia still smaller or in offering an increased resistance subsequently, when the cord is not brought out and down in front of the external oblique muscle. As to the dilated or supernumerary veins of the cord, they certainly enlarge the internal ring, and after their removal the ring can be made smaller. The transversalis fascia of the cord is overstretched in most cases of oblique hernia, and if this relaxation be not taken up, recurrence is favored. Tying and cutting off the sac is not more successful. Stitches for puckering it are the only means of accomplishing it. Stitching the conjoined tendon to Poupart's ligament is taught by many as the most important part of the operation. This tendon may, in some cases, be so thin that when so stitched it will afford but a poor buttress to resist recurrence. In such cases an attempt should be made to bring over the rectus and attach it to Poupart's ligament as suggested by Bassini. In some cases, no doubt, the attachment of the conjoined tendon to Poupart's ligament gives way on account of the catgut becoming too early absorbed and not being aseptic. For this reason I have endeavored, by experiment on the cadaver, to devise a plan by which the sutures could be knotted externally on the skin, so that silkworm gut could be used, by means of mattrass sutures, first uniting the conjoined tendon to the portion of Poupart's ligament that folds inwards, the two ends of each suture coming out through the skin and then lapping the inner behind the outer pillar, the ends of each suture doing this also coming out through the skin, I have succeeded in getting all my sutures knotted externally. This method works very well on the cadaver, but I have not yet used it on the living subject. Silkworm gut is not absorbent, and if the skin and suture have been properly prepared before operation I think this method would enable us to avoid the difficulties from too rapid absorption of the catgut and from infection induced by it.

DR. B. MCMONAGLE: I am satisfied with Bassini's operation and have performed it successfully a number of times. Drs. Coley and Bull say it is one of the best. Nearly all of the other operations have some good points. I do not thoroughly understand the claims set forth by the author for the operation he has described, but I can see no advantage in it over that of Bassini or Halstead. As to suture material, catgut is, no doubt, the best. Marcy prefers kangaroo tendon, but it is quite difficult to sterilize it.

DR. CAMPBELL FORD: I have performed this operation and can only say that, in my opinion, it is the best one for the radical cure of inguinal hernia.

DR. STINSON: The sac, in 98 per cent. of the cases, is in front of and independent of the cord, and it may be, and frequently is, adherent to it. During the past four years I have made repeated dissections of these structures and am positive as to my statements regarding the position of the rings, canal, etc., under normal conditions. Any one can demonstrate on himself, in a warm bath, the relation Poupart's ligament bears to the conjoined tendon. The infolding of the sac into a pad does form a plug. It is simply held by a suture and must act as a wedge as it is acted upon by the pressure of the diaphragm which is transmitted through the intra-abdominal contents. Again, nature knew enough to throw off the excess or process of peritoneum from the abdominal cavity, and surely the surgeon should have sense enough to remove it. As to the pulling down of the internal ring to the external ring, this cannot be done as the pubic bone is below. The internal ring is merely an extension of the transversalis fascia which the cord carries on it. Under normal conditions the cord winds around the pubic bone at the ileo-pubic suture. The internal and external rings can be enlarged in any direction except at their lower angles. When we speak of pulling down the internal to the external ring, what really takes place is this: The internal and external rings both dilate at their upper angles, the pillars of the internal ring yielding to the protrusion which, acting as a lever, dilates the upper angle of the external ring, carries the whole backward to the internal ring. As a rule, it is not necessary to remove the veins of the cord unless they are markedly varicose. When excised this should be done high above the internal ring and not in the canal. The conjoined tendon is always present, and if you look carefully for it you will find it. In order to cure an inguinal protrusion, it is not sufficient merely to insert a couple of stitches through the conjoined tendon to Poupart's ligament; their structure must be considered, and they must be separately and accurately sutured. I have assisted DeGarno, Coley, Morris, and others, in these operations, and I have done quite a number myself. In no case was it necessary to suture the rectus to Poupart's ligament, and I think it is practically impossible to do so. In preparing sutures I think Dr. Farnum uses too strong a solution of corrosive sublimate. Morris uses 1:4000, which is strong enough. A single layer of silkworm gut sutures through all these structures, including the skin, is not at all suitable, as it does not accurately approximate the edges of the different layers; besides, this material cuts and irritates the tissues and has to be removed before union is firm and durable. I think I have shown clearly, in my paper, how this operation differs from those of Bassini, Halstead, Macewen, and others. The 85 operations I have reported, were either performed by me or were such as I have assisted in while House Surgeon at the Post-Graduate Hospital, in New York, and since I have left that institution.

Electrical Apparatus.—DR. PHILIP MILLS JONES exhibited an electrical apparatus for adapting the ordinary street current for office use. He also showed a new head mirror lamp, and explained its utility. A skiagraph of the neck and upper chest were exhibited, in which the shadow of the heart could be seen.

Election of Officers.—The following were duly elected officers for the ensuing year:

President	F. B. CARPENTER
First Vice-President	E. G. FRISBIE
Second Vice-President	J. F. MCCONE
Recording Secretary	A. P. WOODWARD
Assistant Recording Secretary	F. B. PETRIE
Corresponding Secretary	LUCY M. F. WANZER
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Librarian and Curator	D. W. MONTGOMERY
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Committee on Medical Ethics	W. W. KERR, W. B. LEWITT, G. B. SOMERS, H. M. SHERMAN, L. M. F. WANZER.
Committee on Admissions	W. FITCH CHENEY, C. E. FARNUM, KATE I. HOWARD, R. L. RIGDON, DUDLEY TAIT.
Committee on Finance	G. F. SHIELS, WASHINGTON DODGE, C. G. KENYON
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Executive Committee	H. B. A. KUGELER, EDWARD GRAY, G. H. EVANS, C. G. LEVISON, E. G. FRISBIE.

SAN FRANCISCO MEDICO-CHIRURGICAL SOCIETY.

Regular Meeting, December 7, 1896.

G. W. BUSHNELL, M.D., in the Chair.

Treatment of the Typical Fracture of the Radius.—DR. MEINHARD contributed a translation of an article by Dr. Stoop, of Koenigsburg, bearing this title. The treatment advocated in this paper is, briefly, to discard all splints, replace fragments, put the hand in extreme ulno volar flexion, and wind a few turns of adhesive plaster, 10 cm. wide, around the forearm as far as the styloid process. The limb is then suspended by a band around the neck. After ten days the bandage is removed, the hand placed in a sling, and the patient directed to cautiously move the fingers as much as possible. The average duration of treatment is three weeks.

DR. A. W. PERRY: I have had no experience with the line of treatment advocated in the paper. I believe, however, that the usual difficulty is that the splint is too long. I begin motion on the fifteenth day. I have never attempted it so early as the tenth. After the eighth or tenth day I cut away the splint little by little, so as to allow free motion of the fingers.

DR. L. C. LANE: I have treated many of these cases. I have had much trouble with them, and the results, in general, have been unsatisfactory to me. The fracture is most frequent in old ladies. There is usually union, partial ankylosis, and rarely a satisfactory result. One day, some years ago, when I was in Europe, I hunted up Abraham Colles, after whom this fracture was named. He was an Irish surgeon, residing in Dublin, who, about this period, 1820–30, wrote in an Edinburgh journal a clear account of the fracture. Accordingly I expected to find a pretty old man. I found a Dr. Colles, but he was not the man. It was his son. I asked him about the fracture. He replied: "To tell you the truth, I do not know much about it. My father was interested in those things, but I do not care much about them. I am an obstetrician." Hamilton, in this country, has changed his views. He does not now bandage the hand. He leaves it free, using simple anterior and posterior splints, and he gets much better results than with the old pistol splint. Reduction is a vital point in this fracture. Some Frenchman, whose name I do not recall, has proven that as the hand is pushed back, the anterior carpal ligament is pulled off and with it comes the end of the radius. This fragment is wedge-shaped and is what dislocated the ulna. The main thing, in treatment, is to replace this fragment, but to accomplish this is often exceedingly difficult; once it is replaced it is very easy to keep it in position. Sometimes this fragment can be grasped and brought down with the lithotomy forceps. After replacing as well as possible, I have used a short anterior and posterior splint, leaving the hand free. Massage is important on account of effused blood. This should be begun within a week. It reduces the swelling. But with all these methods I have never yet obtained as good a result as I wished. Several times I have been nearly sued for malpractice, but I have never yet actually suffered that misfortune. It is not always clear just how this fracture is produced. One case of mine, that of a woman, had her hand wrapped up flexed and in her pocket. She fell in that position and produced a typical Colles' fracture. How this could occur is not very plain. The anterior carpal ligament was relaxed—a case opposing the Frenchman's view.

Dr. Stanley Stillman: The best treatment of fractures is to be found in America. We do not need to go to Germany to learn how to treat fractures of the radius. The hand being forced back, the anterior carpal ligament is put upon the stretch. The force continuing, the ligament pulls off the end of the radius. If the force still continues, the fragment luxates the ulna, and becomes impacted. The *sine qua non* is reduction. Get the fragment out of its false position and back into its place. Hyperextension unlocks the fragments where all direct pulling and tugging at the hand will fail. Bring the hand sharply back, the fragments will loosen, then bring the hand and forearm into line. Apply a short simple splint or no splint. Leave the hand and fingers free. Begin passive motion on the third or fourth day. The fragments, if they are replaced, will not be easily displaced; they will remain in position without any support. The fifteenth day is too late to commence passive motion. Eczema follows the use of an adhesive plaster. Lead plaster will not produce it. There is always a choice between good cosmetic effect and a stiff joint, or useful joint with slight deformity, *i. e.*, broad wrist. The whole secret is complete reduction, and I do not believe this can be accomplished except by the hyperextension method.

Dr. C. E. Farnum: I agree that much depends upon reduction. Dr. Roberts impressed the idea expressed by Dr. Stillman, upon us some years ago at a meeting of the American Medical Association; but the difficulty of reduction is great. In the majority of cases, perhaps, it cannot be done satisfactorily except under general anesthesia. I would not attempt to examine and reduce a case in an old person except by the aid of an anesthetic. First make traction in the line of displacement, then bring down in the opposite direction, and the fragments will be unlocked. Practically no splint is necessary. The fragment holds itself in place. I have seen many of Dr. Lane's cases, and the results are good, notwithstanding what he says. With complete reduction, a simple wrist bandage is all that is required. I have lately used a short posterior splint covering half the forearm and coming down to the wrist, but not below the end of the radius, leaving the hand free. A corn plaster will protect projecting bony parts. In fractures along the extensor tendons, absolute rest is sure to be followed by unsatisfactory results.

Dr. Emmet Rixford: At the City and County Hospital, we have used, with fair results, after reduction, a short splint, notched at the end for the styloid process of the ulna. The hand and fingers are free.

SPECIAL CORRESPONDENCE.

LONDON.

[FROM OUR OWN CORRESPONDENT.]

Socialism and Water.—Imperfect Filtration of London Water.—The Method of Estimating the Bacterial Contents of Water.—Beatty vs. Cullingworth.—Dwarfism and Gigantism.

A heated controversy has arisen with regard to the purity of the water supply of London. The whole story is a somewhat long one, but in regard to the earlier stages I need only mention a few points. At the last election for the London County Council, the members returned produced an almost perfect balance between the two parties—the "Progressives" and the "Moderates." Previously the former had had a large majority; in the present Council they have, through the Aldermen, who are coöpted, still a majority, though a very small one. The Progressive platform contains a good many planks which are shrewdly suspected of socialism. The municipalization not only of water, gas, and means of locomotion (especially of tramways), but also of labor, has been urged, and the last named ambition has led to some manipulation of accounts which, at the present moment, is causing a public scandal. Water is now supplied to London by a number of companies, each having a monopoly of a certain district. These companies are extremely wealthy, and have combined to fight for their monopolies. The County Council has been advised to purchase the interests of the companies, and these bodies ask to be paid on the present capital value of their undertakings. This mode of estimating the sum to be paid is resisted on two grounds: (1) That in the near future, of London continues to grow at anything like the present rate, large capital expenditure will have to be made to obtain an increased supply; and (2) That the water supplied, even as it is, is bad: *i. e.*, contaminated with sewage. The two arguments are allied, for if the water be bad, the need for a new supply becomes the more urgent, and the true value of the companies' properties less. Owing to the suspicion of socialism under which the party long dominant in the Council rests, the assertions as to the impurity of London water have been received by the public with very much less confidence in their accuracy than would have been the case had the question been from the first approached in a spirit at once judicial and scientific.

Nearly the whole supply is drawn from the Thames and the Lee. It is practically certain that no more water can be got from the Lee, and not much more from the Thames, unless great storage reservoirs are formed to catch the flood water. The companies have for many years past published periodical reports by chemical analysts certifying to the purity of their water as supplied after filtration, and for some years bacteriological reports of an equally optimistic kind have emanated from the same source. Recently the County Council has employed independent analysts and bacteriologists to examine the water as delivered, and the acute phase of the controversy now reached is due to the reports of the experts, especially that of Dr. Klein, the bacteriologist. He finds first of all that the water as supplied in the hydrants contains frequently and in large numbers the bacillus coli communis; and in the second place various other organisms relatively gigantic—infusoria and flagellate protozoa.

The Thames above the intakes of the companies' works is known to be heavily contaminated with sewage. Dr. Klein's results show that the filter beds fail to arrest the organisms generally held to be most characteristic of sewage, and not only that, but are at times so grossly defective as to let through other much larger living organisms. His results and conclusions have been attacked with a warmth and *animus* which can only be explaimed by the political and pecuniary considerations mentioned at the beginning of this letter. The assailants have, however, failed to make any breach in his entrenchments; and it is now generally accepted by those most competent to judge that the filter beds fail to arrest, on all occasions, microbes present in the river water, and that, therefore, organisms of specific diseases, such as typhoid fever, may get through Further, the medical officers of health for many of the London districts believe that the endemic typhoid fever of London is due to infection from water; an opinion which has the support of Mr. Shirley Murphy, the medical officer to the County Council. We are told that the remedy must be found either in a fresh source of a pure supply, or in a trustworthy means of purifying the present supply. It is rumored that an attempt is to be made to bring about the use of the Pasteur-Chamberland filters on a very large scale to replace the sand filter beds. This would be a gigantic experiment, the success of which must be considered exceedingly doubtful. The other alternative points to the proposal to obtain water from one or more Welsh lakes. Bala Lake is mentioned, the large body of water in which could, it is stated, be very greatly increased by a dam to be erected at a reasonable cost. Liverpool already gets its supply from a Welsh valley, which has been converted by a big masonry dam into a lake, which has been stocked with fish.

The point upon which Dr. Klein was chiefly attacked was that he estimated the number of microbes in the water after incubating. The rule generally followed by water examiners, mainly it would seem to save trouble, has been to make plate cultivations at the ordinary room temperature. This is, of course, an arbitrary rule, and would fail to cause many microbes to grow, and these probably, from the public health point of view, the most important. Other standards of this nature proposed by bacteriologists often seem equally arbitrary. Bidder, for instance, has proposed to erect a bacteriological standard for milk, under which any milk which contained on plate culture less than 50,000 microbes in 1 c.c. would be passed as good. This standard would allow the bacillus of tubercle always to escape. No bacterioscopic method which fails to take account of the nature of the bacteria in milk or water will ever become permanently useful.

The action Beatty *v.* Cullingworth, has excited a great deal of interest. The defendant is the well-known obstetrician and gynecologist of St. Thomas' Hospital. The plaintiff, a young woman upon whom he operated four years ago for ovarian disease. The plaintiff's case was that she had specifically instructed Dr. Cullingworth that if, during the operation, it was found that both ovaries were diseased neither was to be removed. At the operation it was found that the right ovary was extensively diseased, and that the left was diseased also, though not so severely as its fellow. Dr. Cullingworth removed both, acting as he believed, in the best interests of his patient She has since been engaged in litigation with him. The recent trial came on before the same Judge as presided in the case against Dr. Playfair, which attracted so much attention early this year. The plaintiff was represented by the same barrister who won against Dr. Playfair. The trial was begun last summer, but was adjourned over the long vacation. Dr. Cullingworth was examined and cross-examined at great length. It was shown that the patient when she came into the operating room said that if the left ovary was found to be diseased as well as the right, she did not wish either to be removed; that Dr. Cullingworth replied to the effect that the question of removing one or both must be left to his judgment, and that the patient did not make any reply to this. After hearing his evidence, that of his assistant, of Dr. Herman, and of Mr. Lawson Tait, the jury stopped the case and gave a verdict for the defendant. Much comment has been excited by the fact that Sir Spencer Wells appeared in the witness box for the plaintiff, and gave an opinion adverse to the opinion which Dr. Cullingworth formed at the time knowing all the circumstances, and having the diseased organs under inspection. It is urged that opinions formed merely from a perusal of the clinical notes of a case ought not to be put in opposition to those of competent surgeons formed from actual inspection. It is announced that the plaintiff intends to apply for a new trial, relying apparently upon the contention that she did not give specific permission for the removal of both ovaries.

A discussion which might have been interesting was commenced at a recent meeting of the Royal Medical and Chirurgical Society, on Dwarfism and Gigantism. Unfortunately the reader of the first paper, Mr. Hastings Guilford, took up so much time, that when he had finished, the hour and a half had almost run out. The case he described and illustrated by photographs was a very exact parallel of a case described by Mr. Jonathan Hutchinson, to the same society, some years ago. The condition appears to be a spinal form of developmental disease hitherto unrecognized. It may be described as premature senility, the subjects dying of old age at 20 years or less. They have little or no hair, prominent eyes, thin inelastic skin, pot belly, and are mentally old fashioned. The photographs show queer little old men, who might be any age. Mr. Gilford tried to trace a connection between this condition and acromegaly, which, as Dr. Dana has shown, is a disease from which many show giants have suffered, and in support of this apparent paradox, produced a photograph of three sisters: the one acromegalous giantess, who had been taken about Europe as a show in contrast with a sister who was a dwarf, while the third sister was of ordinary stature. The dwarf certainly presented some resemblances to the cases of premature senility presented by Mr. Hutchinson and Mr. Gilford, but the last named appeared to go too far in attempting to bring "General Tom Thumb" and "Corporal Nutt" into the same category. My recollection of these two celebrities, which is confirmed by the photographs, is that they were fat, sturdy little men, without any obvious signs of disease. "General Mete" was, on the contrary, frail and small, with prominent eyes, and a prematurely senile look. There are dwarf horses, and dwarf dogs, free from any sign of disease. Why not also dwarf men?

If all those who express their intention to go to Montreal to attend the annual meeting of the British Medical Association, on August 31st next, carry out their designs, there ought to be a memorable meeting. Unfortunately, it is easier to scheme summer holidays than to take them. Montreal is making great preparations, and it will not be the fault of the local profession in Canada if the meeting is not eminently successful. A novelty is the proposal to invite a distinguished Parisian professor to give one of the general addresses. This is out of compliment to the French speaking colonists.

LONDON, November 30, 1896.

CORRESPONDENCE.

The Plague of Dispensaries and Clinics in San Francisco.

Sir—The medical profession in San Francisco is suffering from indirect rate-cutting and other practices that are lowering very much its dignity and emoluments. There are in San Francisco about 500 regular physicians in active practice. There are four medical college clinics or dispensaries with a staff, including assistants, of 130 physicians; 20 smaller dispensaries with 35 physicians attached, and about 30 physicians who do not rigidly exact consultation fees, but are satisfied with pay for the medicine which is supplied from a dispensary attached to the office. There are 150 benevolent societies whose members receive medical attention for an average price of $2.50 per head per annum. The membership of these is about 15,000 When so much medical practice is done at these very low prices, what is left for the physician who is guided by the spirit of the Code of Ethics of the Medical Society of the State of California?

Par. 3, Art. 1 of the Code condemns "those who publicly offer medical advice to the poor gratis." The medical societies of California and San Francisco, whose province it is to maintain medical ethics, have been for the last 15 years mostly controlled by the members of the faculties of the medical colleges, and they (the societies) seem to construe the above paragraph as applying to individuals only; not to those combinations of physicians who, ostensibly for teaching purposes, offer free medical advice to the poor—I say ostensibly, for certain facts show that advertising is the principal object, and teaching and the improvement of the medical profession is secondary. If the dispensaries are only to afford clinical instruction in those diseases not severe enough to be admitted to a hospital, they would only treat enough for this purpose, whereas they treat so many, and those so quickly, as to be quite useless for teaching purposes. The legend over the door reads, "For the Sick Poor," but it is notorious that there is no attempt made to exclude those who from their dress, manners, or reputation are known to be able to pay. Often the well-to-do are more welcome than the poor, for obvious reasons. In olden times the medical college was called the Alma Mater of its graduates, but a mother that brings its offspring into the world and then takes away from them their means of support, deserves to be called "the cruel mother." It will be hard for the dispensary and college physician to convince the outsiders that they are doing anything unprofessional when they follow their example and open private dispensaries. An effort is now being made by the outsiders to break up all dispensary, lodge, and contract practice by opposing consultations with them. I think the evil has grown too great to be crushed by opposition; it must be neutralized by competition. I would advise all physicians who are injured by dispensary practice to organize, in groups of three to ten physicians, dispensaries in their own neighborhoods, all over the city. In this way the college dispensary physician would have no undue advantage over those outside. OUTSIDER.

San Francisco, Cal.

OBITUARY.

DR. C. McL. BATES.

CICERO MCLEAN BATES was born in Cleveland, East Tennessee, August 15, 1831. He was educated at Oceocee Academy and Hiawassa College. He chose the practice of medicine as his profession, and graduated from the Medical

Department of the University of Pennsylvania in 1855. He then returned to Cleveland, Tenn., where he engaged in practice for 5 years. In 1860 he moved to Nevada City, Cal., a then thriving and wealthy mining town, where he practised until 1869, when he moved to San Francisco, and there built up a large practice. Recognizing the great necessity for better sanitary and quarantine regulations he took upon himself the task of drawing up a bill to rectify these matters, and having it presented to the Legislature. This bill was passed in 1870, and upon the organization of the Board of Health following its passage he was elected Health Officer of San Francisco in recognition of his services. He served in this capacity for 4 years, during which time he was elected to the Chair of Clinical Medicine in the Toland Medical College, now the Medical Department of the University of California, which position he retained for 11 years, finally retiring owing to ill health. During this time he was visiting physician to the City and County Hospital, to the Hebrew Orphan Asylum, and also for a number of years a Commissioner of Lunacy. In 1875 he introduced a resolution in the San Francisco County Medical Society appointing a committee to draft a bill for presentation to the Legislature to regulate the practice of medicine in California. Dr. Bates was appointed chairman of this committee, and, together with the late Dr. Henry Gibbons, drafted the bill, and presented it to the Society for its approval. The bill was accepted, and the committee instructed to present it to the Legislature, which they did, and after a great deal of time and labor the bill became a law on April 3, 1876. When the bill became a law Dr. Bates was elected a member of the Board of Examiners, and served for six years, during two of which he was chairman. In 1880 he began to pass uric acid calculi from his right kidney, and in 1882 these attacks had become so frequent that he was obliged to relinquish his practice, and the different offices he held, and search for health among the mineral springs of California. He found complete immunity from his troubles at Highland Springs, in Lake county, and he purchased the springs, and made them a popular health resort. In 1888 he disposed of his property in Lake county and removed to Fresno county, where he lived in retirement on his fruit ranch. After leaving the springs, pus appeared in his urine, and his right kidney swelled, at times as large as a man's head. He consulted a great many physicians, who almost universally agreed that the kidney was breaking down, and that a mass of detritus would plug up the ureter until the kidney was so distended that the force engendered would carry the plug out and relieve the distension. From his original weight of 194 pounds he fell away to 88 pounds, and on November 18, 1896, passed away. An autopsy was held by Drs. Rowell and Pedlar of Fresno, a number of local physicians also being present. It was found that every vestige of the right kidney had suppurated away, and there was nothing left but the thickened capsule as a suppurating sac. Lying loose in this sac was a calculus the size of a small plum pit. Projecting from the wall of the sac was another calculus about half as large. Dr. Bates leaves a widow and two sons—Dr. W. E. Bates, of Davisville, Cal., and Fred. L. Bates, of Alaska.

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DR. W. R. CLEAVELAND.

WILLIAM RUSH CLEAVELAND, who died on the 4th of October, 1896, at Oroville, Butte county, California, was born on the 7th of February, 1846, at Barnston, Stanstead County, Province of Quebec. His father was a physician of excellent repute, and the son at an early age determined to enter the profession of medicine as a life work. His scholastic training was accordingly made to conform to that idea. After a preparatory course at Stanstead Academy he entered the classical department of Harvard University. Here he pursued his studies for two or three years, but owing to adverse circumstances was obliged to leave before his graduation. His medical education was acquired at Dartmouth College, Hanover, New Hampshire, from which institution he graduated in 1868. Thence he returned to Stanstead, where he engaged in practice, ultimately succeeding to the field occupied for so many years by his father. He removed to California in 1884, on account of health considerations, and settled at Biggs, where he resided until a few months prior to his death, when he changed his residence to Oroville. This move was necessitated by his having been elected to the position of County Physician of Butte county. Dr. Cleaveland possessed a peculiar aptitude for his chosen calling. His early training was sufficiently thorough and comprehensive to enable him to enter upon his professional studies with more than ordinary facility. His tastes and habits were those of a student, and his methods of expression were constantly in evidence, showing intellectual attainments of a high order. Although for many years engaged in a laborious practice, he nevertheless found sufficient time to familiarize himself with the progress of medical science in its various departments, and it was noted by his colleagues that his daily clinical work was conducted along the lines of the best thought and opinions of his time. Throughout his professional career he gave evidence of a profound faith in the value of a high standard of ethical conduct and relationship. From this it follows that he was faithful in his allegiance to medical organizations. In debate he was prompt, modestly positive, and notably dignified in his championship of scientific truth or professional decency. His services in the formation and conduct of the "California Northern District Medical Society" were signalized by his elevation to the presidency of that body during its comparative infancy. The courtesy, fairness and efficiency which characterized his administration will ever remain a pleasant memory with his associates. To those who knew Dr. Cleaveland best, this notice would scarcely be acceptable were not some allusion made to those qualities of mind and traits of character, which, equally with his professional attainments, endeared him to his family, his friends, and to the community in which and for which he labored. His temperament was kindly, genial, sunny. His touch was gentle, and in his presence all felt the restful influence of his tone and manner. To him human sympathy was the very essence of human existence.

T. W. H.

REVIEWS AND NOTICES.

E. B. TREAT has in press for issuance early in 1897 the *International Medical Annual*, being the fifteenth yearly issue of that well known one-volume reference work. The prospectus shows that the volume will be the result of the labors of upwards of 40 physicians and surgeons of international reputation, and will present the world's progress in medical science.

W. B. SAUNDERS announces the early appearance of a new book, "Anomalies and Curiosities of Medicine, by George M. Gould, M.D., and Walter L. Pyle, M.D. Several years of exhaustive research have been spent by the authors in the great medical libraries of the United States and Europe in collecting the material for this work. Medical literature of all ages and all languages has been carefully searched. The facts, which will be of extreme value to the author and lecturer, have been arranged and annotated, and full reference footnotes given, indicating whence they have been obtained. In view of the persistent and dominant interest in the anomalous and curious, a thorough and systematic collection of this kind (the first of which the authors have knowledge) must have its own peculiar sphere of usefulness.

MEDICAL NEWS.

LICENTIATES OF THE BOARD OF EXAMINERS.

At a meeting of the Board of Examiners, held November 9, 1896, the following were granted certificates to practise medicine in this State:

Burr Reeve Abbe, Jr., Los Angeles; Coll. Phys. and Surg., N. Y., June 12,'95.
Edmund B. Alexander, Hedges; Med. Dept. Univ. Penn., June 7,'94.
Edward G. Beeson, Los Angeles; Iowa Coll. Phys. and Surg., Ia., April 4,'94.
Conant B. Brierly (lieu certificate), Hawthorne, Nev.; Toland Med. Coll., Cal., Oct. 2,'66.
Oliver S. Burns, Los Angeles; Kentucky School of Med., Ky., June 30,'85.
Chas. Lee Caven, Los Angeles; Coll. Med., Univ. Southern Cal., June 3,'96.
Adelina M. Feder, San Francisco; Med. Dept. Univ. Cal., July 13,'95.
A. H. Gianinni, San Francisco; Med. Dept. Univ. Cal , May 13,'96.
Segrid Helgerson, San Francisco; Minneapolis Coll. Phys. and Surg., Minn., April 11,'94.
F. P. C. Marquis, St. Paul, Minn.; Victoria Coll., Coburg, Canada, April, '86.
Samuel F. Smith, San Jose; Med. Dept. Univ. Michigan, Mar. 26,73.
Henry C. Trask, San Francisco; Med. Dept. Univ. Cal., May 13,'96.
James Vickrey, South Bend, Wash.; Med. Coll. of Indiana, Feb. 25,'86.
John E. Whitmore, Sacramento; Bowdoin Coll., Me., July 11,'78.

CHAS. C. WADSWORTH, Secretary.

Official List of Changes in the Stations and Duties of Officers serving in the Medical Department of the U. S. Army (Division of the Pacific) from November 20, 1896, to December 20, 1896.

Captain Merritte W. Ireland, Assistant Surgeon, is relieved from duty with the squadron, 4th Cavalry, now at Madera, California, and he will return, without delay, to his station—Benicia Barracks, California. Par. 2, S. O. 145, Dept. of Cal., Nov. 21, 1896.

Leave of absence for twenty-three hours is hereby granted Captain Merritte W. Ireland, Assistant Surgeon. Par. 1, S. O. 147, Dept. of Cal., Nov. 24. 1896.

Telegraphic instructions from these headquarters, of the 25th ultimo, to the commanding officer Fort Sherman, Idaho, directing Surgeon Louis Brechemin to proceed to Fort Spokane, Wash., for temporary duty, are confirmed. Par. 3, S. O. 199, Dept. of the Columbia, Dec. 3, 1896.

Major Louis Brechemin, Surgeon, is relieved from temporary duty at Fort Spokane, Wash., and will return to his proper station, Fort Sherman, Idaho. Par 4, S. O. 199, Dept. of the Columbia, Dec. 3, 1896.

Leave of absence for one month is granted First Lieutenant Paul F. Straub, Assistant Surgeon, Angel Island, California.

Official List of Changes in the Medical Department U. S. Navy (Pacific Station) from November 20, 1896, to December 20, 1896.

Surgeon C. T. Hibbett detached from U. S. R. S. Independence, Mare Island, Cal., and to hi home.

Past Assistant Surgeon F. W. Olcott to U. S. R. S. Independence.

Medical Director G. W. Woods, U.S.N., reported his return from attendance on Pan-American Congress, as naval delegate.

Past Assistant Surgeon Ansner Talnenholt from U. S. Naval Hospital, Mare Island, an Oregon.

Past Assistant Surgeon Geo. Rothganger form Oregon and to U. S. C. S. Steamer Patter and later transferred to U. S. S. Pinta, Sitka, Alaska.

Assistant Surgeon W. M. Wheeler to U. S. Naval Hospital, Mare Island, Cal.

Past Assistant Surgeon Carl D. Brownell to U. S. S. Petrel, at Mare Island, Cal.

Surgeon Clement Biddle to Marine Rendezvous, San Francisco, Cal.

Past Assistant Surgeon C. P. Bragg from Marine Rendezvous, San Francisco, and to U. S. S. Marion, at La Libertad.

Surgeon D. O. Lewis from U. S. S. Marion and to his home, cruise having expired.

Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine Hospital Service (District of the Pacific) from November 20 to December 20, 1896.

M. J. Rosenau, Past Assistant Surgeon, is granted leave of absence for thirty days from December 2, 1896.

Rupert Blue, Assistant Surgeon, when relieved from duty at San Francisco Quarantine, to proceed to New York, N. Y., for temporary duty.

ITEMS.

Dr. A. H. Sweeney has removed from 4656 Eighteenth street to 1814½ Scott street, San Francisco, Cal.

Dr. A. A. Stafford has removed from 1617½ Webster street, San Francisco, to 1602 Sherman street, Alameda, Cal.

Dr. A. H. Julian has removed from 1925 Fillmore Street, San Francisco, to Janesville Lassen County, California.

Lane Hospital—Physician Wanted.—The managers of Lane Hospital desire a medical man to fill the post of Resident Physician in their institution. The applicant must not be less than thirty years of age, professionally competent, have executive ability, and without family. Apply to Dr. L. C. Lane, Lane Hospital, Webster and Clay Sts., San Francisco.

The American Association of Obstetricians and Gynecologists, at its ninth annual meeting, held at Richmond, Va., elected the following officers for the ensuing year: President, James F. W. Ross, M.D., Toronto; Vice-Presidents, George Ben Johnston, M.D., Richmond, and John C. Sexton, M.D., Rushville, Ind.; Secretary, William Warren Potter, M.D., Buffalo; Treasurer, Xavier O. Werder, M.D., Pittsburg; Executive Council, Charles A. L. Reed, M.D., Cincinnati, Lewis S. McMurtry, M.D., Louisville, A. Vander Veer, M.D., Albany, J. Henry Carstens, M.D., Detroit, and William E. B. Davis, M.D., Birmingham. The next annual meeting will be held at the Cataract House, Niagara Falls, N. Y., Tuesday, Wednesday, Thursday and Friday, August 17, 18, 19 and 20, 1897.